

## Chapter 14

## 14.0 RESPONSE TO COMMENTS

### 14.1 INTRODUCTION

The Draft Environmental Impact Statement (DEIS) was completed in July 2000 and a Notice of Availability of the DEIS was published in the July 28, 2000 issue of the *Federal Register*. A public notice was issued on July 20, 2000 and its comment period was set and extended to October 11, 2000. Public hearing sessions were held on August 29 and September 25, 2000. Over 2,000 people attended the hearing sessions, and approximately 9,000 comment letters were received regarding the project, about 5,500 of which were form letters.

In order to address the numerous comments, the United States Army Corps of Engineers (USACE), identified comments for response under the National Environmental Policy Act (NEPA). These comments were then grouped into general issues and then responses to these comments were written accordingly.

This chapter is organized to facilitate the identification of the commenters and provide appropriate cross-referencing to the summary comments and related responses. The first section of this document contains a list of all the commenters, as well as assigned individual letter codes. The next section contains the general comments and responses corresponding to the original DEIS section. Following each comment is the individual letter codes of commenters who commented on that particular issue.

To find the response to a comment:

1. Locate your name in the following list of commenters. (Federal, state and local agencies are listed first, followed by organizations, then individuals, all listed alphabetically).
2. After locating your name, refer to the comment and response code(s) in the far right column of the table, referring to issues you raised.
3. Turn to Section 14.4. Responses to comments are presented in numerical order by comment and response code (which corresponds to EIS chapters).
4. The comment and response identify the issue raised and USACE's response to the comment.

To identify other commenters who raised the same issue, refer to the letter code following the comment and compare it to the alphabetical list of commenters.

## 14.2 List of Form Letter Commenters

### 14.2.1 Form 1 Names

|                       |                            |
|-----------------------|----------------------------|
| Abramson, Gail        | Barron, Anne               |
| Ace, Andrea           | Bartle, Christopher H.     |
| Adair, Galena         | Bauer, Frederick           |
| Adams, Annette        | Bayer, Benjamin            |
| Affrunti, Patricia    | Bayer, Hannah              |
| Agius, Brad           | Beall, Chris               |
| Agius, Steve          | Beck, John C.              |
| Aiello, William A.    | Beehler, Roberta           |
| Alama, Pauline J.     | Belington, Myrna           |
| Allgaier, Emily       | Belson, Chad & Robyn       |
| Ambrosio, Louis       | Bender, Robert             |
| Andreasen, Norman     | Bennett, Diana             |
| Andreyko, Helena      | Bereczki, Judith           |
| Andrzejczyk, Kim      | Bernstein, Nikki           |
| Angarone, Nicholas    | Best, Melanie              |
| Appaluccio, Kathleen  | Bethea, J.                 |
| Applegate, Roland     | Bevacqui, Eileen           |
| Armstrong, Melissa F. | Bianco, Ray                |
| Armstrong, Virginia   | Bierman, Mark              |
| Arnone, Elizabeth     | Bilenky, June              |
| Arrigoni, David       | Birdwhistell, Anne         |
| Arwitz, Nina          | Blackiston, Robert         |
| Atlas, Joanne         | Blagman, P.                |
| Autran, Roland        | Blake, Gail                |
| Avjet Corporation     | Blake, P.                  |
| Azarchi, Lynne        | Blanchfield, Patrick S.    |
| Bagwell, Rosemary     | Blatt, Erin                |
| Bail, Joseph          | Blessing, George           |
| Bailey, Caroline      | Bley, Thomas E.            |
| Bailey, Margaret      | Blood, Phil                |
| Bajwa, Niel           | Blumenfeld, Stan & Barbara |
| Baker, Katherine Lynn | Bork, Beatrice             |
| Baker, Terry          | Borokhov, Paul             |
| Balala, Karen L.      | Botwin, Toon               |
| Balala, Michael W.    | Bowden, Kathy              |
| Banks, James          | Bowler, Elbert J.          |
| Baptiste, Desmond     | Bowman, JoAnn              |
| Barbaris, Ernest      | Brawer, Wendy              |
| Barker, Diane & Bill  | Brennan, Matthew           |
| Barnes, Scott         | Brice, Coleman             |
|                       | Brotman, Brian             |
|                       | Brotman, Joseph            |
|                       | Brotman, Sibyl             |
|                       | Brown, Hilary R.           |

Brown, Michael  
Brown, Tom  
Bucheli, Miriam  
Bunch, Terry  
Bunnell, Terra  
Burgess, William  
Buriani, Michael  
Burns, Denise  
Burton, David C.  
Butler, Dan  
Butler, Lance H.  
Byrne, Geraldine  
Caffrey, Frank  
Calamoneri, David  
Campbell, Kris  
Campbell, W. Robert  
Cannella, Jesse  
Cannon, Mary E.  
Cantania, Marilyn  
Cantillo, J.  
Canty, Geoff  
Capezzali, Shannon  
Carlson, Faye  
Carola, Dorothy  
Carola, Gina  
Carola, Hugh M  
Carr, Helen & Colleen  
Carroll, Michael  
Carroll, Michelle  
Carroll, Robert  
Cassera, Anthony  
Cato, Harold  
Cerchio, Nicole  
Cesnick, Eric  
Chabora, Elizabeth  
Chandler, Donald  
Charkey, Lori  
Charnes, Ruth  
Chasnow, Ruth R.  
Cherdack, Jean  
Chesapeake Management Group, L.L.C.  
Chin, Meiling  
Chinai, Cecilia B.  
Christian, Mary Jo  
Chukoskie, Leanne  
Churchhill, Jeanne N.  
Churchill, Stephen K.

Cicchino, Chris  
Cigol, Karin  
Cirulli, Donald G.  
Cirulli, Maureen R.  
Clark, Joe  
Clark, Maria  
Clark, Maria R.  
Clarke, Marjorie J.  
Clements, Patricia  
Cluen, George  
Cohen, Larry  
Cohen, Norm  
Cohn, Lucille  
Cole, Marlene  
Coleman, Jeff  
Collins, Joan  
Collins, Wallace  
Colson, Linda  
Cooke, Caswell  
Coradini, Denise R.  
Cosentino, Randy & Robin  
Cosmas, Thomas  
Cotton, Keith  
Covello, Katie  
Crusius, Elsbeth  
Cummings, Megan  
Cunha, Adam  
Curtis, Barbara  
Czerwinski, Cathy  
D'Agostino, Sue  
D'Anzica, Tony L.  
Dagostino, Rudolph  
Dalton, Pat  
Dasgupta, Arpan  
Data-Samtak, Susan  
Davis, John  
Davis, Linda  
Deaconeasa, Angelina  
Dearborn, Virginia  
Deckert, Susan  
Delabre, Lynne  
Demarest, Robert J.  
DeStefano, Joe  
Devereaux, Catherine  
Devine, Dana  
Dicken, Shawn  
DiNorcia, Kelly Coyle



Dion, Autumn Marie  
Dixon, K.A.  
Domber, Edward  
Donovan, Catherine  
Dougherty, Kevin J.  
Downing, Hilary  
Doyle, Kerry  
Doyle, Leslie  
Dranikova, Leya  
Drastal, Susan  
Dreyling, Chris  
Driller, Jack  
Driscoll, Hannah  
Duggan, Frances  
Dunlap, Jim  
Dunne, Loretta  
Dyrsten, Roberta  
Dzielak, Charlene  
Eberbach, Margaret L.  
Eckhart Jr., Nils C.  
Edelman, Cheryl  
Egan, Kenneth M.  
Egan, Lois I.  
Egan, Nancy  
Egan, Richard G.  
Egan, Richard T.  
Egan, Rose M.  
Eibl, Carl  
Eidmann-Hicks, Russell  
Eldon, Jim  
Elgrim, Dennis  
Elsaid, Bill  
Elsaid, Fadi  
Emans, Kate  
Ember, Steve  
Enedy, Christine  
Engel, Walter  
Erdmann, Linda  
Erickson, Kathleen  
Estes, Brian  
Estrada-Petersen, Zacch  
Etter, Carol Anne  
Etzi, Susan  
Evans, Matthew  
Fabrizio, Alfonso  
Fallon, Elizabeth  
Falzarano, Caroline

Farinas, Manuel  
Farkas, Daniel, Karyn & Talia E.  
Farrell, Craig  
Fazio, Donna  
Fein, Aaron  
Felci, Rosary  
Fenster, Steven  
Ferguson, Nicola  
Ficara, Suzanne  
Filo, Joseph  
Fisher, Murray  
Fishman, Temma  
Fiverson, Steve  
Flores, Steven  
Flowers, Bobbie D.  
Forman, Tyler  
Formont, Glenn  
Fox, Barbara  
Fox, Caterina  
Fox, Eugene  
Franke, Jakob & Gely  
Franzen, Beatrice  
Fraser, Sarah  
Frasher, Keli  
Frey, Wilma E.  
Frisone, Margaret  
Frisone, Steve  
Fritchman, Lynn  
Frost, Greta  
Frueh, Janet  
Ftera, Constance  
Galluzzi, Joseph  
Gamache, Bob & Joy  
Gandolfini, Patricia  
Garber, Julie  
Gardner, Dan  
Gardner, Stephen  
Garramone, Kathryn 'Kage'  
Garvin, Thelma  
Gearman, Janet  
Gearman, Kenneth  
Gebhardt, M.  
Gershman, John  
Giacchi, Jen  
Gilbert, Dennis  
Giloley, Dorothy  
Giordano, Dino

Glauser, Charlotte  
Gleim, Bradford  
Goedesky, Jacqueline H.  
Goehring, Dorothy  
Goetz, Norma & Marty  
Goldman, L. M.  
Goodnough, Jonathan  
Gordon, David F.  
Gordon, Pamela  
Gordon, Susan  
Gordon, Robert M.  
Gough, Beth  
Goulstone, Alexandra  
Graycar, Jen  
Grayson, William H.  
Green, Judith  
Green, Shawn  
Green, William  
Gregg, Theresa  
Grendze, Rita  
Gress, Margaret  
Grobel, Mary  
Gross, Patricia  
Guedes, Jennifer  
Gulick, Martha  
Hadj-Chikh, Leila Z.  
Hallberg, Judith  
Hamilton, Helen  
Hansen, David  
Haraughty, Brandon  
Haraughty, Shanon  
Harley, Chris  
Harmon, Joan  
Harriz, John  
Harvey, Claudia  
Haveson, Cori  
Hayes, Sara  
Haynes, Gemma  
Heller, Lucy  
Henderson, Amy  
Hennessey Jr., John  
Hepler, Laura  
Herrington, Stephen  
Hickey, Michael  
Hilton, M.  
Hinsman, Susan  
Hirschfeld, Nancy

Hoberg, Matt  
Holder, Derwyn  
Holland, Jill  
Horner, Phyllis A.  
Horowitz, Tina  
Hosgood, Jennifer  
Howe, Rachel  
Hsia, Stephanie  
Huang, Yang  
Hujber, Gerry  
Hulme, Nancy  
Humphreys, Brent  
Hunt, Catherine M.  
Hunter, Jason  
Hutchings, Wendie  
Hutchison, Eve  
Ijadi, Sara K. B.  
Jachimiak, Christy  
Jenkinson, Robert  
Jensen III, Christian  
Jensh, Ruth  
Ji, Dottie  
Johanson, Kenneth  
Johnson, Carole M.  
Johnson, Kenneth W.  
Johnson, Mary T.  
Johnston, Robin  
Jones, David  
Jones, Linda C.  
Juday, Christopher  
Juelg, G. Russell  
Kalina, Jenny  
Kaplan, Eva  
Kaplan, Stuart  
Kaselow, Frederick  
Kassel, Charles  
Kassel, Kerul  
Kaszubski, Elizabeth S.  
Keating, Colleen  
Kelly, Jim  
Kennedy, Patricia  
Kenney, Kristin  
Keshet, Ahuva  
Kilkenny, John  
King, David  
King, J. J.  
Kirby, Rolf

|                        |                                   |
|------------------------|-----------------------------------|
| Kirlin, Maureen J.     | Lev, Vera P.                      |
| Klein, Adam            | Levin, Anna                       |
| Kleinfelter, Kelly     | Levin, Carol                      |
| Knab, Robert           | Levine, Jeff                      |
| Knight, Chrissie       | Liano, Greg                       |
| Knowlton, Stephen R.   | Liccese, Anthony                  |
| Knudsen, Lynne         | Liccese, Joseph E.                |
| Kobayashi, Tomohiko    | Licitra, Paulette                 |
| Kopp, Jacob            | Lifset, Robert                    |
| Koshinskie, Bob        | LoCascio, Ralph                   |
| Koski, Wendy           | Lodato, Mary                      |
| Kossoff, Evan          | Loesser, Susan                    |
| Kotsonis, John         | Lohman, Sally A.                  |
| Kovacs, Toby           | Lord, Herbert                     |
| Kraft, Daniel          | Lorentz, Erna                     |
| Krakowiak, Nicole      | Lorenzo, Nestor M.                |
| Kramer, Rachel         | Lucatorto, Anthony                |
| Krauss, Marian         | Lundt, Donald                     |
| Kriesel, Leslie        | Lynch, Laura (Lawrenceville)      |
| Krupka, Christine      | Lynch, Laura T. & Rich (Ringwood) |
| Kuehn, Carol           | Madigan, Ron                      |
| Kurtz, Jason           | Magno, Debbie                     |
| Kurz, Josephine        | Maguire, Virginia                 |
| Labriola, Lisa         | Mahar, Timothy                    |
| Labuda, Joseph         | Mahler, Linda                     |
| Lagno, Marie & Richard | Makin, Darlene                    |
| Laiserin, Rachel       | Malchman, David                   |
| Lamasney, Rita         | Malinowski, Paul                  |
| Lambert, Bernard       | Maloney, Greg                     |
| Lane, Carole           | Manicone, Andrea                  |
| Largman, Theodore      | Manicone, Joseph W.               |
| Largman, Rich          | Manion, Jill                      |
| Larotonda, Albert      | Mann, Steven                      |
| Larsen, Arthur         | Manni, David A.                   |
| LaSpina, Mary          | Manni, Inna                       |
| Lawrence, Stuart       | Mannos, Allison                   |
| Laws, Miki             | Marano, Susan                     |
| Leather, Mary          | Marchini, Anna                    |
| LeBeau, Louise         | Marchini, Brandi                  |
| Lechtanski, Cheryl     | Marinich, Eugenia                 |
| Ledgin, Stephanie P.   | Marshall, Gustavo                 |
| Leeman, David          | Marshall, Geoff                   |
| Lehman, William        | Marshall, Taylor                  |
| Leitch, Donald         | Martin, Gertrude                  |
| Lesko, Erin            | Martinez, Vincent A.              |
| Lesser, Jonathan       | Mattioli, Karen M.                |
| Letarte, Marie         | Maurer, Regina M.                 |

|                              |                         |
|------------------------------|-------------------------|
| Mausner, Dan                 | Morse, Karen            |
| Maxam, Don & Elsie           | Moulaert, Azur          |
| May, Stephna                 | Muench, Stephanie       |
| Mays, Sandra                 | Muller, Alan J.         |
| McAuliffe, Kristin           | Mulligan, Daniel        |
| McCabe, Tanya G.             | Munro, Laetitia         |
| McCaffrey, Mike              | Musser, Krista          |
| Mccormick, Ellen Paul        | Myers, Richard G.       |
| McDevitt, Anne               | Nagy, Ronald            |
| McDonough, Mary              | Nance, Dane             |
| McDonough, Michael           | Needleman, Leigh        |
| McFadden, Mary               | Neiss, Charles          |
| Mcglathlin, Paul             | Nerish, Renee           |
| McGuire, Susan               | Netto-Miranda, Marianne |
| McHugh, Melissa & Matthew    | Neuhaus, Margie         |
| McKittrick, Hugh             | Neves, John             |
| McMurray, James A.           | Newsome, George         |
| Meek, Kevin L.               | Ney, Gerald A.          |
| Meggitt, Jane                | Nichol, Graeme          |
| Melvin, Emma-Lynn            | Nieves, Danika          |
| Menonna Jr., Nicholas        | Nikitin, Cynthia        |
| Mensik, Lori                 | Noble, Pat              |
| Merritt, Greg                | Nogaki, Jane            |
| Merten, N.                   | Norouzi, Andrea B.      |
| Metler, Angi                 | Norouzi, Parisa         |
| Metzelaar, Megan             | O'Brien, Lisa           |
| Meyer, Linda                 | O'Connor, Alissia Naomi |
| Meyer, Robert                | Oliver, Beth            |
| Meyers, Paul                 | Oliver, Charles         |
| Milch, Alfred                | Olson, Jane             |
| Miller, Chris                | Ordonez, Raul           |
| Mills, Richard K.            | Ormrod, Diane           |
| Miloscia, Lawrence           | Orozco, Gloria          |
| Minck, Art                   | Osowski, Amie           |
| Mirsky, Kenneth              | Page, Kenneth           |
| Mohn, Jim                    | Palsgrove, Jason        |
| Monaghan, Alida              | Panos, Lauren           |
| Monma, Clyde                 | Pantaleo, Judith        |
| Montgomery, Elizabeth A.     | Parker, John            |
| Moore, Diane                 | Parker, Michael A.      |
| Moraghan, Timothy            | Parrish, Karen          |
| Morano, Deborah              | Paslowski, Jennifer     |
| Morea, Michael               | Pasquini, Anthony C.    |
| Moretz, Donovan              | Pate, Josie             |
| Morewood, Mr. & Mrs. William | Patrone, Virginia       |
| Morey, William               | Patterson, Karen        |
| Morris, Tom                  | Paul, Alan              |

|                        |                               |
|------------------------|-------------------------------|
| Payne, David E.        | Richards, Joyce               |
| Pearson, Anne          | Rifken, Hal & Vera            |
| Pepper, Darlene        | Roberts, Melissa              |
| Perlow, Tim            | Rodriguez, Jackie             |
| Perry, Louis J.        | Roff, Rhonda                  |
| Peterson, Barbara      | Rogers, Gary W.               |
| Petti, Sharon          | Ronan, Kari                   |
| Pfeiffer, John F.      | Rosenbaum, Rose               |
| Pfoutz, Kathleen       | Rosenberg, Suzy               |
| Pharmakidis, Alexandra | Rosenblatt, Murray & Enid     |
| Phillabaum, Carol      | Rosenfeld, Gila               |
| Phillabaum, Larry      | Rospond, Mr. & Mrs. F. J.     |
| Picard, Debbie         | Roskam, Carol                 |
| Pickarski, John        | Rothman, Marni                |
| Pike, Richard          | Rothman, Maureen & David      |
| Pita, Dorothy & Ed     | Rouyer, Magali                |
| Pizza, Joanne          | Rowan, Veronica               |
| Pochtar, Daniel        | Rubock, Elizabeth B.          |
| Pochtar, Rosa          | Rudolph, Kevin M.             |
| Poletti, Jessica C     | Rudzki, Michael               |
| Pope, Anne             | Runkle, Ben                   |
| Porch, Thom            | Ruscigno, Pat & Mike Hilliard |
| Post, Nancy J.         | Rutkowski, Abram              |
| Power, M.              | Ryan, Sean                    |
| Powers, Diane          | Sabek, Joannie                |
| Praetorius, Bob        | Sagarin, Jill                 |
| Pringle, David         | Sagato, Chris                 |
| Pugh, Naajee           | Sagato, Judy                  |
| Puglisi, Richard       | Saiewitz, Robert              |
| Puleo, Philip          | Salmon, Ronald J.             |
| Pyle, Karen            | Sanderson, Paul               |
| Quimby, Dana           | Sanoff, Ida                   |
| Ramaswamy, Lakshmanan  | Santasania, Carmen T.         |
| Randall, Margaret      | Saporito, Dolores             |
| Rannelli, Wayne        | Sarantitis, Demetri           |
| Rapp, Harold           | Sashaw, B.                    |
| Ray, Carol             | Sauers, Ronald                |
| Raywood, Margaret E.   | Savincki, Jennifer            |
| Redden, Robb           | Schick, Kevin                 |
| Reichert, Greg         | Schlee, Raymond O.            |
| Reid, Kathy            | Schlette, Wendy               |
| Reilly, Sheila         | Schlobohm, Marie              |
| Reina-Rosenbaum, Rose  | Schmelz, Lance P.             |
| Remaud, Greg           | Schneider, Fred               |
| Reskakis, G.D.         | Schnitzer, Stanley S.         |
| Reynolds II, Joseph S. | Schvejda, Dennis              |
| Riben, Adira           | Schvejda, Tina                |

Schwartz, Andrew  
Schweighardt, Rosemary  
Schwickrath, Nancy  
Scully, Joanne  
Seel, Martin  
Seeley, Loretta M.  
Seidenstein, Marc  
Selender, Michael D.  
Seligson, Charles  
Sena, Melanie  
Serrano, Thomas  
Sgambati, Lori  
Shaeffer, Lawrence  
Shah, Tara  
Shapiro, Mona  
Sharapata, N.  
Shaw, Jannell  
Sheehan, Bill  
Sheldon, Kimberlie E.  
Sherman, Louise L.  
Shinn, Zoe & Steve  
Shook, Gwen  
Shure, Ken  
Siefken, Debra  
Siegel, John H.  
Signorile, James V.  
Silberstein, Peter  
Silva, Philip  
Silver, Joanne  
Simon, Eric J.  
Sincaglia, Craig  
Sindler, Robert  
Skelly, John  
Sklow, Jennifer  
Sloser, Michael  
Slotnick, Susan B.  
Small, Barbara  
Smith, Ben  
Smith, Kenneth  
Smith, Lynda  
Smolin, Audrey  
Solomon, A.  
Solomon, Charlotte  
Somalwar, Sunil  
Somers, Julia M.  
Sommer, Joseph  
Soteropoulos, Patricia

Southern Appalachian Biodiversity  
Project  
Southwell, Michael  
Spann, Kathryn E.  
Spence, Jeremiah  
Spoto, Jack  
Staehle, Cynthia  
Stamm, Charles  
Stampoulos, George A.  
Stapleton, Bernie  
Steadman, Marlis S.  
Steencken, Elena  
Stein, Debbie  
Stein, Traci  
Sterlace, William & Isabella  
Stewart, Elizabeth  
Stewart, Gavin  
Stewart, Lisa  
Stitt, Laura  
Stoner, Larissa  
Stonier, Maria & Jeff  
Stout, Joseph  
Stoveken, Scott  
Strauch, Jim  
Strauss, Martin J.  
Stringer, Donna  
Strober, Mark  
Stromsmoe, Kent M.  
Stroup, Laura J.  
Stryker, Melissa  
Stuck, K.  
Sturm, Paige  
Sugar, Hilary  
Suglia, Vicki  
Sulinski, Gail T.  
Sumrall, Doris  
Sundberg, Annie  
Suthers, Hannah B.  
Sybrandy, Cecilia  
Tanner, Lori  
Tassillo, Laura  
Taub, Miriam  
Teninty, Michael  
Thornton Jr., B.P.  
Thoumi, Gabriel Andres  
Tichacek, Keith  
Tillery, Bonnie

Tobin, Stanley  
Tomkins, Clare  
Tompkins, Jeffrey  
Tondi, Greg  
Toohers, Noelle  
Torino, Donald  
Torretagle, Mary  
Tousman, Jane  
Traas, J. Stanley & Miriam  
Tracy, Elizabeth  
Trilling, Jo-Ellen (NJ)  
Trilling, Jo-Ellen (NY)  
Tsoukalas, Eva  
Tucker, David B.  
Tucker, Kenneth D.  
Tulloss, Rodham E.  
Tyrell, Lynn  
Ugarte, Max  
Ugarte, Nilda  
Usechak, Louise  
Uttich, Mary  
Vafa, Behrouz  
Vallee, Nicholl  
Vallone, Cheri  
Vetrini, Al  
Vetrini, Albert J.  
Vetrini, Ted  
Villa, Maricel  
Visco, Matt  
von Dohln, Patricia  
Voorhoeve, Lucy  
Voorhoeve, Niels  
Wagner, Melody Kirk  
Wainright, Scott  
Walker, Herbert  
Wang, Anne  
Warner, Barbara  
Warren, Kenneth S.  
Weber, Barbara E.  
Weeks, Wayne  
Weglinski, Walter  
Weiner, Miriam  
Weintz, Doris  
Weis, Eric  
Weis, Judith  
Weis, Peddrick  
Wenger, Tisa

Wessman, Eric A.  
Wetzel, Celia D.  
Whalen, Christopher  
Whinery, Scott  
Whitby, Richard  
Whitfield, Felisa  
Whitney, Mary Robin  
Wider, Paul A.  
Wieand, Linda  
Williams, Paul  
Willner, Andrew  
Willner, E.  
Wilson, Charles  
Winholtz, Angela  
Winter, Kim  
Wise, Michael  
Wisthoff, Bonnie L.  
Witney, George  
Witt, Joseph  
Witt, Kay  
Witt, Nikole  
Wolff, Sheila  
Wong, Mark C.  
Wood, Lillian  
Wrzesien, Daniel & Margaret  
Yauch, Tony  
Yudelson, Larry  
Yuhass, Catherine  
Zack, Leonard  
Zaidman, Lydia R.  
Zanowitz, William  
Zawoysky, Russell  
Zelcer, Brook  
Zera, Tina  
Zimmerman, Lisa  
Zinn, Robert  
Zitzer, Amy  
Zornesky, Jerome

**14.2.2 Form 2 Names**

Abrantes, Jose  
Abrantes, Manuel  
Andersen, Rudi  
Arevedo, David  
B., Michael (Bayonne)  
Badger, Chance  
Barna, Michael  
Bastin, Rudy C.  
Behan, Heather  
Bonardella, J.  
Boyre, Eric  
Bryant, Earnest – Jr.  
Cap, Mittie  
Carey, I.  
Celi, Jose  
Christiana, Jim  
Christiana, Judith  
Confer, R. G.  
Correa, Ramon C.  
Curruchich, Pedro J.  
D., Anthony (Ridgefield Park)  
D., Richard (Blairstown)  
Da Silva, George  
Da Silva, Manuel  
De Oliveire, Antonio  
Dennhardt, Fred T.  
DeOliveira, John  
Edwards, Lyndon  
Esposito, Frank  
Fels, Paul  
Fernandes, David D.  
Gamarra, Cesar G.  
Giuffre, Joseph A.  
Granells, Peter  
Gregg, Leon  
Heimall, Artie  
Hemmings, Harold  
Hock, Sandra L.  
Kelly, Brian J.  
Laleva, Gregory R.  
Long, Edward  
Mally, Robert  
Matos, Manuel S.  
Mc Alonen, Patrick

Melendez, Rafael  
Monteiro, Jose  
Moran, Tommy  
Novak, Michael  
O., William (Budd Lake)  
O'Neill, John – Jr.  
Pires, Jose F.  
Puccio, Joseph – Sr.  
Pueraro, Margo  
Raia, Michael  
Rocha, Gregory P.  
Rymarz, Stanley G.  
S., Joe (Rutherford)  
Seifert, Thomas  
Sonntag, Susan  
Speranza, C.  
Thompson, Thomas R.  
Vitale, Joseph  
Warren, Tom  
Weber, Michael J.  
Weiner, Ken  
Wolniewicz, Leon  
Wood, Andrew  
Zirpoli, Sheila K.  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8  
Illegible-9  
Illegible-10  
Illegible-11  
Illegible-12  
Illegible-13  
Illegible-14  
Illegible-15  
Illegible-16  
Illegible-17  
Illegible-18  
Illegible-19  
Illegible-20



**14.2.3 Form 3 Names**

Barrett, Jay  
Bello, R.  
Boyre, Eric  
Cacamis, Arlene  
Calicchio, Oreste  
Congiu, B.  
Corvino, Paul  
Creamer, Glenn L.  
Cyr, Gregory  
DeCarlo, Peter  
DeFalco, Maureen  
Doherty, Bryan  
Dunbar, Candace  
Flaherty, John  
Frees, Timothy  
Freschi, Carolyn  
Grambo, Eugene  
Harris, Janet  
Hawkins, Thaddeus  
Hillesheim, Drew  
Horbach, George  
Horne, James M.  
Horvath, Carol L.  
Jones, Alison  
Jugan, Bob  
Kelleher, Patrick  
Kelly, Deborah  
LoForte, George  
Lopez, Sonia  
Mason, Roger  
McKenna, Edward  
O'Brien, Charles  
Perry, Richard  
Piazza, Mike  
Pietropaolo, Frank  
Pruette, Patrick  
Reynoso, Francisco  
Rogers, Ralph F.  
Ruane, Barbara  
Sheurs, Ronald E.  
Smith, Michael  
Terry, Jenifer  
Toscano, Carlos  
Wask, Craig S.

**ILLEGIBLE SIGNATURES:**

Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4

**14.2.4 Form 4 Names**

Aquadro, Donald  
Baptiste, Gabriel John  
Bellini, Ray  
Black, John  
Boyre, Eric  
Bulmer, John  
Cannao, Todd  
Dixon, Andrew  
Galya, Lisa  
Gentile, Peter  
Haas, Scott  
Jones, Bobby  
Kelly, Robert  
Kishel, John  
Legowski, Joseph J.  
Longo, Mark  
Macanka, Stanley E.  
Machuich, Tom  
Markowski, Bernice  
McCulley, Gary R.  
McKena, Michael A.  
McLaughlin, Richard  
Mell, Barbara  
Nelson, Yvette  
Pires, Jorge  
Putz, Ronald  
Quinones, Frank  
Resende, Maria  
Romaine, James J.  
S., Richard (Elmwood Park)  
Santucci, Richard  
Silvia, Peter  
Sout, Joseph  
Stowell, Ralph W.  
Sudziarski, Rose M.

**ILLEGIBLE SIGNATURES:**

Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6

**14.2.5 Form 5 Names**

A., Alberto (Harrison)  
B., Roxanne (Clark)  
Boyre, Eric  
Brown, Robert J.  
Cammarata, Anthony  
Capasso, Don  
Creamer, Dale A.  
Czubat, Simon  
DeJesus, Lucia  
Del Rio, Wilfredo  
DiGilio, Lenny  
Gammero, James  
Hall, Russell  
Hoffman, Michael P.  
Hogue, Keri  
Hollerbach, Lee  
Jannucci, Pat  
Jedziniak, Patricia  
Jorrey, Brad  
Kelly, David  
Leo, James  
Markowski, Bernice  
McCabe, Leo  
McCurrie, H. Leslie  
Murray, Helen  
Nixon, Ronald  
Ostrowski, Michael  
P., Amanda (Pompton Plains)  
Reilly, Todd  
Ribitzki, Kevin  
Romaine, James  
Rosenthal, Sean  
Samarelli, Francesco  
Sanzo, Mark  
Silva, Yosi A.  
Smarro, Michael  
Stumpf, Robert  
Temes, Henry  
Torre, William  
William, Kenneth

**ILLEGIBLE SIGNATURES:**

Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8  
Illegible-9  
Illegible-10  
Illegible-11  
Illegible-12  
Illegible-13  
Illegible-14  
Illegible-15  
Illegible-16

**14.2.6 Form 6 Names**

Alban, Louis  
Amorim, Herculano  
Arigot, Michael  
Boyre, Eric  
Breen, J.  
Buell, Howard  
C., Louis (Milltown)  
Chastain, J.M.  
Cimler, Brian  
Connelly, Thomas  
Cordey, Robert S.  
Corlaccio, Ernest K.  
D., Larry (Laurel Springs)  
DeLuca, Sperry  
Dugan, John M.  
Evans, Edwin  
Fernandes, Ana  
Hayes, Linda  
Keil, Michael A.  
Kologe, Tracey  
Locascio, Paul  
Mayer, John  
Moralos, Pedro  
Murray, Tina  
Paige, Neil  
Passaro, Frank J.  
Reiners, David R.  
Riser, Tom  
Rodundo, Angelo  
Rolo, Peter  
Ruta, Joanne  
Salvador, Helder  
Schmalz, Brian J.  
Shults, Kathy  
Spicacci, Dennis  
V., Vincent P. (Bergenfield)  
Vitale, Biagis  
W., John W. (East Rutherford)  
Warmenhoven, John H.  
Zurovich, George

**ILLEGIBLE SIGNATURES:**

Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8  
Illegible-9

**14.2.7 Form 7 Names**

Biale, John P.  
Callari, Joseph  
Callari, Joseph  
Cappucci, Nick  
Combs, Philip R.  
DeMarco, Nancy M.  
Duffy, Jim  
DuRen, Kenneth  
Farkas, Joan D.  
Fernandes, Roland  
Gallup, R. Jeff  
Jennings, Kurt  
Junguzza, Dennis  
Kaniuk, Antoinette  
Kologe, Tracey  
Lankes, Richard  
Macaulay, James Patrick  
Melone, Louis  
Metje, Michael  
Milazzo, J. David  
Misciagna, Keith J.  
Reiser, Jason  
Rettagliata, Michael  
Robinson, Michael  
Subrizi, Robert  
Switlyk, Andrew  
Werner, Edmund Jr.

**14.2.8 Form 8 Names**

Accomando, Michael  
Acevedo, P.L.  
Acheampong, Eric  
Alston, Omar  
Ames, Thomas G.  
Andrek, Michael J.  
Andro Jr., Timothy  
Apile, Sal  
Ardecki, Thomas R.  
Argenziano, David  
Ashby, Rene A.  
Baccher, Mick  
Baker, Kenneth W.  
Barden, Zachary T.  
Barone, Ronald  
Bashner, David  
Beams, Scott M.  
Bell, Jason  
Bell, Ronald  
Benavides, Juan  
Bender, Walter  
Benitez, Ivan  
Beucler, William J.  
Bice, Jason  
Bietz, Jason  
Binikos, Louie G.  
Blake, Spencer  
Blasi, Frank  
Bocchichio, Robert J.  
Bocchino, Phil  
Bogdan, Jayna  
Bonner, Daniel  
Bonsu, Jesse  
Bowers, James L.  
Bowman, Gerald  
Boyd, Chester A.  
Branciforte Jr., Vincent  
Branciforte, Vincent  
Brodkin, Siarhei  
Brooks, Charles  
Brooks, Darex  
Brossoit, Michael A.  
Brown, Ateebe  
Brown, Derek  
Bucceri, Edward P.

Bucceri, Matt  
Burdov, Sergey  
Bussanich, Alex  
C., Robert C. (Dumont)  
Calabrese, Kenneth J.  
Calacione, Michael  
Calandra, Philip  
Callaghan, Tim  
Callari, John  
Callari, Joseph  
Camacho, Andre  
Campos, Gustava  
Cappucci, Nick  
Carey, William  
Cariglia, Michael  
Carrico, Victor M.  
Carter, Joseph F.  
Case, James D.  
Casey Jr., Francis J.  
Casey, Vincent T.  
Castillo, Marcos  
Catania, Frank  
Cervino, Craig  
Cespedes, Ivan  
Chaviano, Antonio  
Cherry, Melvin N.  
Chirico, Stephen  
Ciappara, Paul  
Cieslawski, Edward  
Clay, Craig A.  
Coates, James  
Cochrane, Chris  
Combs, Philip R.  
Conahay, Steven  
Conroy, Kenneth  
Cooney, Kevin  
Cosentino, Nicholas J.  
Cosgrove, Shawn P.  
Cowan, Edward J.  
Cowan, James P.  
Cowell, Michael  
Croce, John  
D. Kenneth (Tuckahoe)  
Da Silva, Victor  
Daibes, Richard

Dalessio, James  
Damron, Jerome  
Danio, Anthony  
Dasler, Robert  
Davidson, John  
De Leon, Nester E.  
De Paola, Mark  
De Simone Jr., Joseph  
DeFeo, Kenneth R.  
Delaney, James  
Delcid, Wally  
Des Rosiers, Brian W.  
Devaney, Pat  
Devine, Christopher S.  
Di Lauro, Thomas Gregory  
Di Stasi, Garry  
Diaz, Ramon  
Dievielly, J. Michael  
DiRese, Jason  
Dolan, Terence  
Dolcemascolo, Barbara  
Donahue, Patrick  
Donnelly, Raymond B.  
Dore, Robert Jr.  
Drayton, Marion  
Dwyer, Raymond  
Edwards, Heinz  
Engle, Michael J.  
Eustic, Rich  
Fernandes, Roland  
Filadelfo, Mark  
Finley, Michael G.  
Fischer, Larry  
Fiumefreddo, Frank  
Fleming, Casey  
Foley, Brian  
Ford, Ra Shawn  
Fortunato, James Jr.  
Franklin, William T.  
Fredricks Jr., Richard  
Fredricksen, David  
Fritsch, Steve  
Fritts, Jack  
Fuchs, Rich  
Gaglioti, Joseph  
Garretson, Clifford  
Gennarelli, Francis T.

Gentile, Franco  
Getchell, Bob  
Gialloreto, Mike  
Giorgianni, P.F.  
Giorgio II, John A.  
Giulini, Anthony  
Godbold, Everett L.  
Gola, Jared  
Gonzalez, David M.  
Gonzalez, Melvin  
Graf, Jonathan  
Gray, Michael L.  
Greulich Jr., Richard  
Gritsan, Vasyl  
Gumble, Dan  
H. John (Hopatcong)  
Hall, Shawn  
Hammond, Barry M.  
Hancock, Neal  
Harageones, David A.  
Harris, Shon  
Heffner, Robert T.  
Heller, John M.  
Heller, John M.  
Henry, Joseph P.  
Hernandez, Oscar  
Hernandez, Richard  
Heuer, Joshua  
Heuer, Todd  
Hibbits, Scott  
Hicks, Joel W.  
Hodge, David  
Horashinski, A.  
Hunter, Bryan  
Jacquett, Bryan  
Jankowski, James  
Jaworski, Stanley R.  
Jennings, Kurt  
Jennings, Robert  
Jiminez, Humberto  
Johnson, Darryl  
Johnson, Donald  
Johnson, Glenn  
Johnston, Thomas P.  
Jones, Anthony T.  
Jones, Dennis A.  
Joseph, David

Kane, Kerri A.  
Kates, Anton L.  
Kazanjian, Paul  
Keller, Michael J.  
Kelly, Elizabeth  
Kluska, William  
Koehler, Joan  
Koehler, William J.  
Koehler, William R.  
Kolesnik, Janusz  
Kolage, Tracey  
Koprowicz, Steven J.  
Kornegay, Hasheem M.  
Kozlick, Barbara  
Krimsky, Steven  
Krol, Scott  
Kruszewski, Thomas J.  
Kruziak, Steve  
Kuhn, Matthew D.  
Kuhnen, Garrett D.  
Kummer, Raymond  
Lahotsky Jr., Donald A.  
Lambert, John  
Lambert, Michael  
Lambert, Wallace P., Jr.  
Lambert, Willard  
Lamberty, Jimmy  
Lamotte, Donald R.  
Landers, Vincent Jr.  
Lankes, Richard  
Lapidus, Chris  
Lattera, Joseph A., III  
Lawrence, Russell  
Leahy, Lawrence  
Lebet, Robert  
Ledee, Manuel  
Lee, Terrence G.  
Leibrock, Thomas P.  
Leonard, Mark  
Lewis, Paul  
Lillis, Donald P.  
Lindlar, Ernest G.  
Liscum, Ryan  
Lolk, Peter  
Lopez, Gerry  
Losgrove, Shawn P.  
Lowenstein, Eric M.

Lubrano, Ralph A.  
Luvera, Paul J.  
Lynch, Don  
Lynn, Al-Tariq  
Lyubomudrov, Yuriy  
M., James P. (Bernardsville)  
M., Roman (Edison)  
Macaulay, James Patrick  
Machcinski, Tom  
MacKnight, Brett  
Macko, Vladimir  
Maher, Chris  
Mahon, Vincent  
Mahoney, Vincent G.  
Marasciulo, John  
Marino, Joseph  
Marion, Kevin  
Marold, John A.  
Marra, Angelo  
Martelliti, Dave  
Martin, Andy  
Martin, Eugene  
Martin, Joe  
Mattessich, Jeff  
Matthews, Joseph W.  
McAllister, Jesse James  
McAllister, Matt  
McCabe, Brian  
McClure, David III  
McEwan, William G.  
McGill, John E.  
McLean, James  
Melahn, Aaron  
Melms, Steven J.  
Melone III, Leonard J.  
Melone, Chris  
Mendler, Dan  
Metje, Michael  
Miller, Jeff  
Miller, Michael D.  
Milligan, Stephen  
Mintz, Murry C.  
Mizimakoski, B.  
Molesky, Zigmont  
Mollica, Nick  
Mooney, Ryan  
Moore, Alvin



Moore, Michael J.  
Moro, Jonathan  
Moskwa Jr., Joseph A.  
Moyano, Gerard  
Moyp, Wade  
Muhammad, I.H.  
Mullen, William M.  
Munoz, Edwin  
Murch, Wendy L.  
Nangle Jr., Bernard M.  
Nappi, John N.  
Narvaez, Jay  
Navarro, Norma  
Nesterov, Igor  
Nestory, Stephen P.  
Neubauer, Joseph F.  
Nieman, James E.  
Nogueira, Alvaro  
Nordyk, John A.  
Nunn, Jon  
O'Connor, Ed  
O'Sullivan, William J.  
Ortiz, Edwin  
Ostrovskiy, Boris  
Owusu, Kofi  
P., Henry W. (Union Beach)  
Pabon, Gilbert R.  
Palazzi, Gregg  
Palma, Nicholas  
Paquette, Andrew  
Parks, Ron  
Paschek, Arthur  
Pasculli, Vincnt  
Patacao, Paul  
Pedroso, Lenny  
Perez, Alain  
Perry, Gregory  
Pettrow, Albert A.  
Pichardo, Jefe  
Piech, David  
Pineda, Dalzzio  
Pohle, Chris  
Polewka, Jeff  
Ponce, John  
Previglian, Christopher, J.  
Price, William E., Jr.  
R., Carlos E. (West Orange)

Ramessar, Rajendra  
Rascio, Tim  
Ray, Nathaniel  
Reiser, Jason  
Reisinger, Paul  
Remak, Kelly C.  
Rennie, Mike  
Rettagliata, Michael  
Rhodes, Scott  
Ribot, Juan  
Richardson, John  
Rinyak, Peter  
Ritchie, Dennis M.  
Rivera, Harry  
Rivera, Samuel  
Robinson, Michael  
Rodriguez Jr., Anibal  
Rodriguez, Oscar  
Rooks, James  
Roscitt III, Joseph M.  
Roselle, Samuel  
Ross, Gary S.  
Rossi, Jerry  
Rothwell, Michael  
Rouselle Jr., Charles  
Rubenestein, Howard  
Ruiz Jr., Luis E.  
Ruiz, Jose D.  
Rusek, Erik  
Russell, Donald P.  
Russell, James  
Ryan, James V.  
S., Damiano (Lodi)  
Sanchez, Robert  
Saullo, Francis  
Scaglione, P.  
Scalera, Ralph  
Scarcella, Peter A.  
Schainit, Ron Jr.  
Schmittler, Thomas  
Schneider, Ernest  
Schober, William J.  
Schweitzer, Thomas  
Scimeca, John  
Scoulllos, William  
Sears, Todd  
Sedell, Richard

Servilio, Matt  
Sewell, Gavin  
Shubaderov, Nikolay  
Shubaderov, Vladimir  
Sicignano, Antonio  
Silva, Paulo J.  
Simmons, George E.  
Slader, Brian  
Smith, David  
Smith, James E.  
Smith, James R.  
Smith, Oscar  
Solleder, Adam  
Sonson, Joseph K.  
Spadaccini, George  
Spann, William  
Stapleton, Patrick  
Stapleton, Robert  
Stefanacci, Matthew R.  
Stefanco, George  
Stefanco, Stephen M.  
Stepanian, Mark  
Stewart, Justin  
Stock, Charles J.  
Stoft, George  
Stoner, Clinton  
Strommer, Brian  
Strunck, John H.  
Subrizi, Robert  
Suk, Michael  
Sullivan, Rick  
Surinski, Paul  
Suta, John  
Sweeney, Tom R.  
Switlyk, Andrew  
Talbot, Mark W.  
Tanis, Dustin  
Tapia-Luna, Jose Alfonso  
Thomas, Hamilton R.  
Thompson, Steven  
Thoms, Vincent  
Towell, John  
Tozzi, John  
Tuscano, Jamie  
Unianzon, Jose R.  
Urban, Christopher W.  
Urban, Ronald R.

Valentin, Jose  
Van, Donald R.  
Vandermark, Anthony  
Varro, Joseph A.  
Vasilakis, Spyros  
Vasilik, Chris  
Vasto, Paul  
Viri, Michael Anthony  
Walker, Stephen  
Walker, Tom  
Walker, W.  
Ward Jr., Clinton  
Ward, Joseph M.  
Ware, James L.  
Warner, Leslie  
Warner, Steve  
Watkins, Joseph  
Wersebe, Scott  
Westervelt, John K.  
Whittles, Danny  
Williams, Gregory  
Williams, James  
Williams, John  
Williams, Roland  
Williams, Tyrome C.  
Wittenwiler, Donald  
Wroblewski, Eugene  
Yallo, Anthony  
Yodice, Jerry  
Yodice, Matthew, J.  
Youngclaus, Kenneth  
Yu, Wai Cheong  
Yuknalis, Joseph W.  
Zachgo, Erik  
Zeltser, Lazar  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8  
Illegible-9  
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Illegible-12  
Illegible-13  
Illegible-14  
Illegible-15  
Illegible-16  
Illegible-17  
Illegible-18  
Illegible-19  
Illegible-20  
Illegible-21  
Illegible-22

**14.2.9 Form 9 Names**

|                                |                      |
|--------------------------------|----------------------|
| Abrantes, Joao (Newark, 07105) | C., Leo Jr. (Linden) |
| Abrantes, Joao (Newark, 07107) | C., Tony (Nutley)    |
| Agira, Carlos                  | Cabica, Carlos F.    |
| Ahedo, Edward                  | Cackowski, Mike      |
| Almeida, Alberto               | Caddle, Leo          |
| Almeida, Jose L.               | Calandrilla, Sandy   |
| Almeida, Manuel (Elizabeth)    | Calano, G.           |
| Almeida, Manuel (Newark)       | Callaghan, Brian     |
| Alston, James                  | Calva, Idalio        |
| Ambar, V.                      | Camean, Cipriano     |
| Antunes, Luis                  | Campbell, Robert     |
| Araujo, C.                     | Carpinello, Larry    |
| Araujo, Diamantino             | Carroll, David       |
| Austin, Christine              | Carroll, Thomas      |
| Austin, James                  | Carvalho, Antonio    |
| Ayala, Klever                  | Carvalho, Augusto    |
| B., Joao C. (Hillside)         | Casale, T.J.         |
| B., John (Union Beach)         | Castro, Jamie        |
| Barbato, Joseph                | Ceaglio, Anthony     |
| Barbosa, Antonio               | Ceaser, Beverly      |
| Barbosa, E.                    | Ceron, Adriana       |
| Barbosa, Jose                  | Cichetti, Lisa       |
| Barone, Joe                    | Clark, M.            |
| Barreiro, Fernando A.          | Clarke, John         |
| Beja, Jorge                    | Coelho, A.           |
| Bernardes, Leino               | Coimbra, Antonio     |
| Berry, A.                      | Colonnelli, Frank    |
| Berry, Robert                  | Colson, John R.      |
| Blank, Shawn                   | Conde, Daniel        |
| Blessing III, William          | Conde, J.            |
| Boniface, Linda                | Conde, Maria         |
| Booker, Phillip                | Conforti, R.         |
| Borghaus, Brad                 | Conover, Richard S.  |
| Bosco, P.                      | Cooke, Robert J.     |
| Bournique, Dan                 | Copelton, Mike       |
| Brakeman, Robert               | Costa, Joao          |
| Branco, Jose                   | Costeira, M.         |
| Broomhall, Lloyd               | Courter Sr., James   |
| Brown, Peter                   | Courter, Marion      |
| Brown, Rosse                   | Coyne, B.            |
| Brucato, Denise                | Cyr, Gregory         |
| Buczynski, Michael             | D., Mike (Haskell)   |
| Budd, Stephen J.               | Da Costa, Jamie      |
| Burrows, L. M.                 | da Costa, Jose R.    |
| C., Carlos (Union)             | da Cunha, Jose       |

Da Silva, Juarez M.  
Da Silva, Valentin  
DaSilva, Jack  
de Almeida, Antonio  
De Cesare, Donald  
De Matos, Jorge  
De Nicola, Ralph  
De Nicola, Rick  
de Oliveira, Carlos (Kearny)  
De Oliveira, Carlos (W. Caldwell)  
De Sousa Jr., Francisco J.  
DeGraw, Marge  
DeGraw, Tom  
Delaney, C.  
Delello, Ted  
DeVries, Timothy  
Dias, Paulo  
DiCarlo, Richard A.  
DiGiorgio, Gerald  
Doering, William  
Dolan, Michael  
Domingues, Antonio  
Domm, Kim  
Domm, Michael  
Donaldson, Steve  
Dos Santos, A.  
Dos Santos, Manuel A.  
Drumm, Robert  
E., Joe (Milford)  
Edward, Robert  
Elmore, Terry  
Erickson, William A.  
Esteves, Jose  
Esteves, Manuel  
Evaristo, J.  
Evernham, Dan  
F., Charles E. (East Rutherford)  
F., Peter (Woodbridge)  
Farrell, Tammy  
Feeney, Doreen  
Fernandes, Aurelio  
Fernandes, Joao  
Fernandes, Manuel  
Fernandes, Ricardo  
Fernandes, Toni  
Fernandez, Antonio  
Ferreira, Antonio

Ferreira, Carlos  
Ferreira, Natalie  
Fields, Artie  
Fields, Jerome  
Figueiredo, Julio  
Fonseca, Joaquim  
Fox, Jared  
Frable, Alden  
Francisco, Susan  
Freer Jr., James O.  
Frei, John  
Frei, Paul  
G., Richard L. (Union Beach)  
Garcia, Antonio L.  
Garcia, Filiberto  
Garcia, Maristela F.  
Gaspar, Antonio  
Gee, David A.  
Giannucio, Louis A.  
Gomez, Mariana  
Gorman, James  
Grady, John  
Gravagna, Michele  
Green, Allen  
Green, Michael R.  
Grego, Joao  
Gudzinis, William  
Guichard, Christopher  
H., Drew (E. Rutherford)  
H., Matthew J. (Iselin)  
H., Richard (Budd Lake)  
Hamstra, Laura  
Hanley Jr., Jack J.  
Haven, Theodore  
Healy, David  
Henriques, Manuel  
Henry, D.  
Hibbs, Amy  
Hibinski, Daniel  
Holzappel, Alan C.  
Hopkins, William  
Horta, Katheryn  
Hufnagel, Valerie  
Hughes, Derek  
Hughes, John  
Iarossi, Marcia  
Inacio, Alina

Inacio, Americo N.  
Isabella, Janene  
Isabella, Mark  
Isabella, Robbie  
J., Gerald (Pittstown)  
Jackson Jr., William E.  
Jackson, William E.  
Jacques, Farrah  
Jesus, Artur A.  
Jones, Lelitia  
Jones, Steve  
K., William (Berkeley Hts.)  
Kansier, Barbara  
Kazoun, Christopher  
Kazoun, Elizabeth  
Kazoun, James  
Kazoun, Tony  
Kazoun, Yvonne  
Kealy, Carol  
Kealy, Stephen  
Kelly, Al  
Kenney, John W.  
Kenyon, Fred  
Kenyon, Glenn  
Kerzan, J.  
King, Terrence  
Kmak, Bob  
Knudson, Ken  
Koch, T.  
Krole, Cathy  
Krole, Tom  
Kullman, Floyd  
L., Anthony C. (Bayonne)  
L., Joao (Elizabeth)  
Lamas, Jose R.  
Lambiase, Joanne  
Lambiase, Tony  
Lamperti, Dave  
Le Soine, Raymond  
Leskanic, Ron  
LeStrange, Mike  
Leyble, Mark  
Liebes, Mark  
Lijo, Joan C.  
Lijo, Joe  
Liquori, Anthony  
Livingston, Reggie L.

Lo Forte, George  
Lombardi, Bernadette  
Lombardi, Robert  
Lopes, Jorge  
Lopes, Miguel  
Lopes, V.  
Lopez, Sebert  
Loureiro, Antonio  
Low, Raymond  
Lowe, Ernie  
Macedo, Manuel  
Maldonado Jr., Gonzalo  
Manata, Elsa  
Mancini, John  
Mancini, Pasquale (Manalapan)  
Mancini, Pat (Ridgefield)  
Manfra, John  
Mann, Carol  
Marques, D.  
Marques, Manny  
Marques, Maria  
Marques, O.  
Martin, Mike  
Martins, Francisco  
Martins, Manuel L.  
Martins, Pedro  
Mateiro, Joe  
Matos, John  
Matos, Nuno  
Mazza, Ian  
Mazzocchi, Robert  
McCabe, Tim  
McCarthy, Jeffrey  
McCloskey, Joe  
McDonough, Andrea  
McDougall, R.  
McNamara, Danny  
Mendez, J.  
Mendez, M.  
Mendonea, Manuel  
Miguel, William  
Millan, Maribel  
Morris, David W.  
Morrison, Mary  
Myszka, Richard  
Nacion, John  
Neto, Antonio

Niejadlik, John  
Niejadlik, Rosalie  
Noweski, John  
Noweski, Linda  
Nunes, Augusto M.  
Nunes, Jose C.  
Nunes, Jose P.  
O., Mary (Jersey City)  
O'Neill, Charles B.  
Oliveira, Antonio  
Oliveira, Joao A.  
Oliveira, Joao L.  
Oliveira, Jose  
Oliveira, O.  
Oliveira, Tony  
Olsen, K.  
Oset, J.  
Oset, Joyce  
Oset, M.  
Oset, Thomas  
P., Anthony (Peekskill)  
P., James (S. Plainfield)  
P., Maria (E. Brunswick)  
P., Nick (Bloomfield)  
Pais, Abilio F.  
Paiva, Jose  
Panduri, Domenico  
Panduri, Frank  
Panfile, Domenick  
Park, Frank  
Pavese, Steve H.  
Pereira, Manuel  
Pereira, Margie  
Petrole, Mike  
Pietropaulo, Frank  
Pilonsky, Mary M.  
Pinho, Sebastian  
Pinho, Tony  
Pinto, Lawrence  
Pinto, Manuel L.  
Piscitelli, Debra  
Pizzuti, Vilma J.  
Pludowski, Victor S.  
Polverino, S.  
Post, Jesse  
Prazerez, Joao  
Procaccini, Anthony

Prokop, Eric  
R., Joe (Harrison)  
Raia, Michael  
Ramos, Manuel R.  
Recio, Luis C.  
Reeves, Frances  
Rego, Joao  
Reinders, Chris  
Ressurreicao, Joao  
Reyes, H.  
Riley, Bill  
Riley, Dawn  
Riley, Lorette  
Riley, Louis  
Riley, Michael  
Riley, Rose  
Rios, Manuel  
Rios, Wilfredo  
Rocha, Manuel  
Rodgers Jr., Gary  
Rodrigues, Antonio  
Romano, Anthony  
Ross, Glenn  
Ross, Mary  
Rossi, Robert  
Russomanno, R.  
Ryan, Frank  
S., Adenito (Union)  
S., Carlos M. (Jersey City)  
S., Domingo (Union)  
S., Don (Bayonne)  
S., Frank A. (Rahway)  
S., Gregory (Jersey City)  
S., Jose (Harrison)  
S., Parminder (Delaware)  
S., Rudolph Jr. (Hackensack)  
S., Steve P. (Little Ferry)  
Santana, R.  
Sanzo, Elizabeth  
Sanzo, Lolita  
Sanzo, Mark  
Saunders, Gordon C.  
Sausa, Fernando  
Scheflen, James  
Schruld, Chris  
Schwerd, Michael  
Scott, Glenn

Seaman, Timothy W.  
Sestayo, Felix  
Shelton, Debra  
Siclari Sr., Rudolfo  
Siclari, D.  
Siclari, Flora  
Siclari, I.  
Siclari, Larry  
Siclari, Orazio  
Siclari, P.  
Silva, Alberto  
Silva, Alexandre  
Silva, H. (Kearny)  
Silva, John  
Silva, Luis  
Silva, Maria  
Silverstein, Jason  
Simmons, Martin L.  
Singletary, Fay  
Soares, A.  
Soares, Elena B.  
Soares, John R.  
Soden, Antoinette  
Soden, Gary  
Sorrido, Miguel  
Sotelo, Gary  
Sousa, Antonio B.  
Sousa, Nelson A.  
Sousa, W.  
Stone, Donald  
Stowe, Bob  
T., Steve (Secaucus)  
Taccio, Joao F.  
Tankel, Scott  
Tavares, Raul  
Teixeira, Manuel  
Thompson, Jim  
Tobio, Jose  
Tomaz, Joao  
Toscano, Carlos  
Toye, G.W.  
Tracy, Scott P.  
Troche, George  
Trombetta, K.  
Truncellito, Salvatore  
Tufaro, Angelo  
Turdo Jr., Richard E.

Turdo, Richard E.  
V., Joaquin (Clark)  
Vagueiro, Augie  
Vagueiro, J. (Kearny)  
Vagueiro, John  
Vagueiro, John B.  
Vagueiro, Jose  
Valeira, Manuel  
Valente Jr., R.  
Valente, Scott T.  
Valerio, Jose M.  
Valerio, Maria F.  
Vandenbos, S.  
Vangieri, Robert  
Vartolone, G.  
Vaz, Mauricio  
Venancio, Faustino  
Venezio, Ralph  
Verbeke, Joann  
Vieira, Acacio  
Viola, Walter  
Vitorino, Anthony  
Vreeland, William  
W., William B. (Fort Lee)  
Walker, Ralph  
Walker, Wayne  
Walsh, John  
Walsh, Paul  
Warren, N.  
Watson, Torey L.  
Weaver, Scott  
Wellinger, Robert  
Wight, Joseph B.  
Williams, Bruce  
Williams, Mark  
Wittkamp, Kevin C.  
Yost, Louis  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8  
Illegible-9



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| Illegible-10 | Illegible-57 |
| Illegible-11 | Illegible-58 |
| Illegible-12 | Illegible-59 |
| Illegible-13 | Illegible-60 |
| Illegible-14 | Illegible-61 |
| Illegible-15 | Illegible-62 |
| Illegible-16 | Illegible-63 |
| Illegible-17 | Illegible-64 |
| Illegible-18 | Illegible-65 |
| Illegible-19 | Illegible-66 |
| Illegible-20 | Illegible-67 |
| Illegible-21 | Illegible-68 |
| Illegible-22 | Illegible-69 |
| Illegible-23 | Illegible-70 |
| Illegible-24 | Illegible-71 |
| Illegible-25 | Illegible-72 |
| Illegible-26 | Illegible-73 |
| Illegible-27 | Illegible-74 |
| Illegible-28 | Illegible-75 |
| Illegible-29 | Illegible-76 |
| Illegible-30 | Illegible-77 |
| Illegible-31 | Illegible-78 |
| Illegible-32 | Illegible-79 |
| Illegible-33 | Illegible-80 |
| Illegible-34 | Illegible-81 |
| Illegible-35 | Illegible-82 |
| Illegible-36 |              |
| Illegible-37 |              |
| Illegible-38 |              |
| Illegible-39 |              |
| Illegible-40 |              |
| Illegible-41 |              |
| Illegible-42 |              |
| Illegible-43 |              |
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| Illegible-51 |              |
| Illegible-52 |              |
| Illegible-53 |              |
| Illegible-54 |              |
| Illegible-55 |              |
| Illegible-56 |              |

**14.2.10 Form 10 Names**

a'Becket, Suzanne  
Abruzzo, Joan  
Ackley, Katherine  
Ackroyd-Rafkin, Abby  
Adams, Brad  
Alexander, Linda  
Alfakyani, Cheryl  
Allen, Janet  
Allen, Sharon  
Allison, Juniper  
Allison, Shelley G.  
Anderson, Gary  
Anderson, Jeff  
Anthony, Elizabeth A.  
Arevalo, Ernesto & Evelyn  
Aronis, Mike  
Asselin, David  
Baca, Alejandro  
Bail, Joseph  
Bakic, Tracy  
Ballard, Tom  
Baloun, Karel  
Bardget, Corinne  
Barfield, John  
Barthel, Carolyn  
Baugh, Jonathan  
Becker, Kerstin  
Beebe, Lisa  
Belardo, Sylvia  
Belk, Carl H.  
Benson, Lynne  
Benton, Trisha  
Bentz, Sally  
Bermudez, Navis  
Bintliff, Karen  
Blair, Michele  
Blakeman, Hannah  
Blanchard III, Peter  
Blatherwick, Anne  
Bleichmar, Javier  
Blumenthal, Carol  
Bodwell, Amy  
Bonace, R. Terence  
Bond, Julie  
Boren, Gary

Bornstein, Richard  
Bourgeois Eric  
Bowling, Beth & Gene  
Boyd, LaNora  
Braden-Whartenby, Geri  
Bradley, Carole  
Bradley, Kim  
Bradshaw, Mark  
Bredemeier, Lydia  
Brezine, Adam  
Brothers, Lindsay  
Brown, Erin N. & Andrew C.  
Brown, Loren  
Budington, Lori A.  
Buergin, Christa E.  
Burns, Michael E.  
Burton, Joyce  
Bush, John  
Caccese, Tyla  
Calvert, Patrick L.  
Campbell, Andrew (CA)  
Campbell, Andrew (NJ)  
Campbell, Christopher  
Canfield, Kerry  
Capelli, Theresa  
Carlson, Janice T.  
Carmichael, Barbara  
Carpenter, Lisa  
Carra, Chris  
Carrier, Joan  
Caruso, Chris  
Cascio, Linda  
Catapano, Lisa  
Chamberlain Jr., Clyde  
Chambers, Claire  
Chance, Kathryn E.  
Chaoui, Luz  
Charles, Lisa M.  
Chasnow, Jo-Anne  
Chen, Eddie  
Chesterman, Aaron  
Cheung, Julia  
Chisena, Melissa  
Christensen, Carol J.  
Churchill, Anna  
Ciccarone, Marie  
Cichowski, Steve and Amy

Ciha, Jim  
Clark, Joan  
Clemens, Kevin  
Clements, Tom  
Clifton, Rosalyn  
Clodfelter, Elizabeth A.  
Cocks, Jan  
Collier, Carol  
Collins, Steven  
Connor, Thomas V.  
Cook, Celia  
Cooks, Jude  
Corcoran, James  
Coss, Shelley  
Coton, Alexandra  
Cox, Jorene A.  
Cunnius, Donald  
Curtin, Robert P.  
Cushing, Sandy  
Danis, Gary F.  
Dawson, Laura  
Day, Maggie  
De Costanzo, Donna  
Dean, Betty  
Decker, Martin  
Denis, Jay  
Diemoz, Lisa  
DiGiovanni, Antony  
Dill, Karen M.  
DiMaria, Pamela  
Dinger, Marilyn  
Dix, Peter K.  
Dixon, Marlin  
Dobbs, Mary L.  
Dodds, Robin  
Doddy, Gwen  
Donati, Liane  
Douglass, Patricia  
Downer, James  
Dudde, Amanda  
Duggan, Darlene  
Durant, Naomi  
Durrett, Heather  
Dworak, Francis S.  
Earl, Andy  
Edelstein, Steven  
Egerman, Robert

Eliasoph, Joan  
Elwyn, Morgan  
Epstein, David  
Espinosa, Patrick  
Fain, Deborah  
Farrell, Courtney  
Farrell, Margaret  
Featherstone, Rob  
Feldman, Debbie L.  
Felice, Anthony P.  
Fenn, Janet  
Fernandez, Anne-Marie  
Ferraro, Nancy H.  
Ferrel, Susan L.  
Fink, Brian  
Fisher, Gretchen E.  
Fisher, Maverick  
Flaxman, Samuel M.  
Fleming, Jacalyn  
Fletcher, Judith E.  
Folkerts, Jessica  
Fox, Kamal  
Freeman, Richard  
Fuchs, Kathleen  
Fuhrman, Adam Joel  
Galarneau, Debra  
Galli, William  
Gamell, Yolanda  
Gannett, Jennifer  
Gantly, Judith  
Gershman, John  
Gevorgian, Christina  
Gillette, J.  
Gingery, Janet  
Golden, Heath  
Gonzalez, Amanda  
Gonzalez, Ruth  
Gore, Jesse  
Gove, Robert  
Graffius-Ashcraft, Karen  
Gragg, Ana  
Grainger, Ross  
Green, Justin  
Grossheim, Barry  
Gunzburg, Tamira  
Gutierrez, Lope  
Haack, Teresa

Halfin, Clara  
Halter, Noelle  
Hammerschlag, Arnold  
Hansen, Michael R.  
Hanson, Nancy  
Harley, Carol  
Harms, Mary  
Harp, Rene  
Hartley, Andrew C.  
Hartley, Gregory M.  
Hatcher, Jeffrey  
Haynes, Lori  
Heberlein, Walter A.  
Heinzig, Dennis  
Herath-Veiby, Gail C.  
Hergert, Marty  
Hernandez, Angel  
Hernandez, Elizabeth  
Herner, Betty Jean  
Heyd, Elizabeth  
Hilbert, Lindsay  
Hobbs, Tammy  
Hoberg, Matthew P.  
Hodman, Amy  
Hoenig, Eileen  
Hoff, Jeanette  
Holder, Alan  
Hubbard, Eugene  
Hughes, Angie  
Hurd, Lynne  
Irby, Tanya  
Irizarry, Milly  
Jacknowitz, Maki  
Jacknowitz, Sheldon  
Jackson, Amanda S.  
Jacobs, Chris  
Jacobson, Regina  
Jaffe, Jordan  
Janis, Robert  
Jarrell, Emily  
Jaynes, Bill  
Jelinek, Alex  
Johnson, Amanda  
Johnson, Erin M.  
Johnson, Kim  
Johnston, Timothy  
Karbowski, Rose

Karlen, Birgitta  
Kasten, Donald  
Katzenbarger, Kimberly  
Kennedy, Bradley  
Kern, Sue  
Kessel, Michael  
Kiesling, Jon  
Killeen, Natalie B.  
Kimura, Torsten  
King, Kathleen  
Kirchner, Jane  
Kirk, Jackie  
Kirk, Nancy Jo  
Kirschling, Karen  
Klein, Mark  
Kleine, Emily  
Kleiner, Cary  
Klika, Tim  
Koerner, Stephen  
Kohn, Steve  
Koslik, David  
Krall, Phil  
Kratzer, Ann & Ron  
Kroehler, Corbett  
Krulan, Steve  
Krzyzanowski, Virginia  
Kurlfink, Julie Kristine  
Lamke, Richard  
Lange, Eileen  
Langham, Rhonda  
Lansdown, Bianca  
Lapointe, Eric J.  
Larkin, Kimberly  
Lechner, Mark S.  
Lechner, Sheila  
LeClair, Elizabeth E.  
Ledwith, Valerie  
Leeburg, Mary  
Lees, Brendan  
Legaspi, Noel  
Leich, Donald  
Leitch, Kathleen  
Lemon, Sandra  
Lentz, David  
Lesnick, John  
Lisiewski, Kitrina  
LoBianco, Ro M.

Logan, Paul  
Long, Sharon  
Longstreth, Ben  
Lopez, Linda  
Lougee, Ellen  
Lubow, Judy  
Lyons, Matt  
MacDonald, Jennifer  
Mackeigan, Chastity  
Mahakian, Steven  
Malchman, David  
Malenfant, Jeffrey  
Malmuth, Sonja  
Manville, Katherine  
Markman, Clea  
Martin, Elizabeth  
Martz, Tara E.  
Massoth, Eleanor  
Mathews, Mary  
Mathies, David C.  
Matthews, Barbara  
Mayer, Joan B.  
Mazey, Daria  
McAllen, Karon  
McClintock, Dana  
McClintock, Fran  
McColl, Chris  
McCreary, Jan & Pat  
McCullen, Carol  
McEvoy, Chad  
McFarland, Michael  
McGaughan, James M.  
McGuire, Matthew J.  
McKenna, Brian S.  
McKinley, Micky  
McMahon, Jennifer  
Mead, Judi  
Meade, Margaret M.  
Meehan, Matilda  
Meier, Bernadette  
Melewsky, Sherry  
Mellen, Jennifer  
Meschi, Diana  
Messersmith, Lynn  
Metrick, Alan  
Metzger, Amy  
Meyer, Cynthia

Meyers, Paul  
Milko, Clara L.  
Miller, Craig  
Miller, Dusty  
Miller, Pat  
Miller, Sally  
Miller, Wister  
Montgomery, James  
Moonier, Laurie  
Morresi, Gian Andrea  
Morris, Roland & Kathleen  
Moss, Chloe  
Motwani, Mona  
Moy, Nanci  
Mulligan, Kevin  
Murphy, Shannon  
Naidu, Bablu  
Nastav, Kristin J.  
Nelson, Cynthia D.  
Nerode, Gregory  
Ness, Steve  
New, Bonnie  
Newton, Jolyn  
Nichols, Kristen  
Oates, Kathleen  
Oben, Ron & Bev  
Oben, Ronald J.  
Olsson, Wendy B.  
Orrick, Greg  
Osborne, Emily  
Osburn, Michael and Jackie  
Osten, Mary C.  
Ostrander, Marvin P.  
Ould, John  
Overbeck, John C.  
Owens, Stephanie  
Pagenkopf, Kris  
Pantic, Diana  
Parker, Julie  
Parris, Muriel M.  
Parton, Chris  
Patel, Bhavik  
Patterson, Lori  
Peppercorn, Marge  
Percival, Barbara  
Perez, George  
Phillips, Sandi

|                             |                              |
|-----------------------------|------------------------------|
| Pinneo, Guy & Janet         | Seaton, Jessica W.           |
| Polakoff, Kurt              | Seiler, Kathleen             |
| Poole, Tansha               | Selikoff, Lauren             |
| Portnoy, Pam                | Shannon, Jim                 |
| Potter, Lisa                | Shell, Jana                  |
| Prather, Beth               | Shelton, Donna               |
| Prendergast, Christopher T. | Shepherd, Helen L.           |
| Prosser, Carol Lee          | Siegel, Owen                 |
| Puca, Robert                | Silk, Pamela J.              |
| Quinn, Patricia             | Simmonds, Theresa E.         |
| Randolph, Chris             | Simons, Bonnie               |
| Randolph, Stacy             | Simpson, Barbara             |
| Rapacchia, Stephanie        | Sinclair, Ann E.             |
| Raphaelidis, John           | Sisk, Kathy                  |
| Ratty, Paul E.              | Sloane, Stephen F.           |
| Reed, Kristin               | Smith, Dan                   |
| Rees, Cherie                | Smith, Kathy J.              |
| Regan, John                 | Smith, Leslie                |
| Remensnyder, Katie          | Smith, Nancy                 |
| Reynolds, Amy               | Snell, Tom                   |
| Riley, Kevin                | Sol-Church, Jack             |
| Roberts, Shelley            | Somalwar, Sunil              |
| Robinson, Sander D.         | Sonnenberg, Robert & Cynthia |
| Robles, Katya               | Souza, Wanda                 |
| Roche, Nathan               | Spengler, Ruth Ann           |
| Rodgers, Patricia           | Spotts, Richard              |
| Romanowsky, John            | Squier, Sheila               |
| Roop, Kenneth               | Squire, Brooke               |
| Roth, Jonathan              | Sriram, Sankaran             |
| Rovito, Markkus             | Sroczynski, R.               |
| Roy, Pamela                 | Stahl, Sonya                 |
| Ruberti, Tucker             | Stancell, Cecilia            |
| Running-Wolf, Uhuru         | Stanton, Joshua              |
| Rustad, Pat                 | Staples, Charlotte           |
| Rutkowski, Robert E.        | Staub, Saskia                |
| Sanders-Klein, Geri         | Steimle, Emily               |
| SanJule, Wanda              | Stephens, Ali                |
| Saul, Steven                | Stewart, Barbara             |
| Saum, Cheryl                | Stewart, John                |
| Savett, Adam T.             | Stewart, Ray                 |
| Scarborough, Marilyn        | Stiefel, Nancy               |
| Scharfenberg, Jeremy        | Stivers, Frank               |
| Scher, Judith and Reid      | Strawder, Jill               |
| Schieron, Nanette           | Strickland, Robert           |
| Schoenfield, Rick           | Strik, Nicolaas              |
| Schwartz, Angela            | Styles, Lynn                 |
| Scozzaro, Stephen V.        | Subler-Plescia, Renee        |

Sullivan, Bernadette  
Sykora, Lyle E.  
Takaht, Cynthia  
Talbot, Nanette  
Tanzer, Claudia  
Tarantola, Danielle  
Teachout, Dee  
Tener, Beth  
Thomas, John  
Thomas, Raechelle  
Thomas, Susan L.  
Thompson, Angela  
Thompson, Nadine  
Tietjen, Kurt  
Tochor, Julie  
Trego, Tonatiuh  
Tucci Jr., Harry J.  
Tupper, Meredith  
Turner, Kathleen Kaeding  
Tuttle, Brenda  
Unterharnscheidt, Anneliese  
V., Jill (MI)  
Valenson, Gail  
Van Bloem, Peter  
Van Dame, Kathy  
Van Vleck, Sarah  
Van Wicklen, Betty  
Vaughn, Shanna  
Verga, Deborah  
Verhoff, Nikki  
Vertrees, Gerald  
Vice, Daniel R.  
Vidaver, Mr. & Mrs. B.  
Villalobos, Cathy  
Vine, Gabriel D.  
Wald, Johanna  
Walsh, Chris  
Wampole, Marjorie  
Warren, Roxanne  
Watkins, Ruth  
Way, Wendy  
Weingartner, Alessandra I.  
Weingartner, Danielle I.  
Weingartner, Gloria I.  
Weingartner, Jason W.  
Weingartner, Warren  
Wells, Andrea

Westervelt, Mary  
Wharton, Barbara  
Wheeler, Breana  
Wick, David  
Williams, Patricia  
Williams, Phoebe  
Williams, Thomas  
Wilson, Rita  
Wingfield, Donna  
Wolf, Robyn & Aizik  
Wood, Barbara L.  
Wood, Melissa  
Worrell, Jasmine  
Wright, Penelope J.  
Wunderli, Marguerite Y.  
Wurzer, Peter  
Wynhoff, Tracey  
Yaffe, George, J.  
Zabinsky, Ben  
Zadis, Peter  
Zakai, Yochanan  
Zaman, Nancy  
Zamber, Donna B.  
Zantek, Paul  
Zappala, Salvatore

**14.2.11 Form 11 Names**

Belli, Joan  
Bianchi, Lena  
Borovian, Eleonar  
Borovian, John  
Cuccinelli, Isabel  
Davis, Thomas R.  
Donnelly, James  
Ford, Stella  
Freund, Carol  
Freund, Elmer  
Gerber, Rita M.  
Kosinski, Evelyn  
Lo Pinto, Josephine  
Mier, Fred  
Mier, Helen  
Murtha, Marie G.  
Murtha, Robert J.  
Parise, Jerry  
Peeters, Anna  
Porcelli, Phyllis G.  
Price, Mary  
Rigoglioso, Vincent  
Scherer, Paul R.  
Seminerio, Catherine  
Seminerio, Joseph  
Sengebush, Margaret  
Siriday, Loretta  
Stagg, Lester  
Stagg, Sophie  
Taormina, Barbara  
Trause, Thomasina  
Truscello, Rose  
Tufaro, Joseph  
Tufaro, Madeline  
Whitlow, Nancy  
Wichmann, Alice  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2



**14.2.12 Form 12 Names**

Attisano, Joseph D.  
Becker, Joseph  
Capo, John F.  
Caruso, Gregory  
Cavallo, Marie A.  
D'Amore, Thomas J.  
Della Salla, Gerald  
DeRenyi, Bill  
Downing, Lee  
Duffy, Jeff  
Gentile, S.  
Gurrera, Daniel  
Holley, Josephine  
Infante, Paola  
Kapiloff, Robin  
Ma, Young  
Mahaffey, Colleen  
Maher, Ken  
Martinez, Luis  
Mato, Laszlo  
Mayer, Rod  
Mendt, Linda  
Mercadante, Gary  
O'Neill, K.  
Patel, Hema D.  
Phillips, Connie  
Piccinich, John R.  
Renna, Salvatore  
Simone, Ken  
Stepkovich, Michael A.  
Tomko, William  
Tsakotelis, John  
Wymbs, Linda  
Wymbs, Martin  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4

**14.2.13 Form 13 Names**

Alajia, Dominic  
Alberque, Madeline  
Altavilla, Salvatore J.  
Ambrosio, Christine  
Ambrosio, Michael  
Andriani, Bonifacio & Madeleine  
Angona, Helen  
Arora, Anita  
Asala, Anthony  
Asala, Lea  
Aumente, Elizabeth P.  
Aumente, John L.  
Aunicky, Marie  
Badami, Frances  
Baer, Frank  
Baker, Dorothy  
Balsamo, Marion B.  
Berardo, Ruth  
Berson, Anita  
Bisso, Mary  
Blaney, Mary  
Blaney, William J.  
Blatz, Louise C.  
Boldt, Agnes  
Bonanno, Sam  
Borkowski, Lucy  
Brow, Anne  
Brown, Nancy & Eugene  
Buckel, Arthur  
Budinich, William J. & Ruth L.  
Budres, Gayle  
Burke, Mary A.  
Burke, William  
Calabrese, Edna E.  
Calabria, Nancy  
Camilleri, Peter  
Campo, Rae  
Canavari, Anita  
Carlo, Rose M.  
Carrajat, Wanda  
Ceppaglia, Hettie  
Chomiak, Emily M.  
Ciasca, Dominic M.  
Ciczik, Chet  
Cirillo, Loretta D.

Civello, Nicholas  
Civello, Phyllis  
Costa, Marie B.  
Costello, Edna K.  
Coyle, Betsy D.  
Coyle, Regina & James  
Daniele, Frank  
Daniele, Mark  
Daniele, Susan  
Darcy, Donna  
DeCotiis, Rosita  
DeDio, Anthony  
DeFilippis, Margaret  
DeGilio, Elaine & Frank  
Delaney, Eleanor  
Delaney, Robert E.  
DeLeeuw, Conrad  
DeLeeuw, Eileen  
DeLeeuw, Lance  
DeMarco, Carmela  
DeMarco, Jean  
DeMaria, Dominic  
DeMartine, Marie & Joseph  
DeMartini, Carol Ann  
DeVincenzo, David  
Diemer, Flo  
Dietzel, Fred  
Dotter, Ruth D.  
Dragonetti, Bridget  
DuBrow, Rita  
Eaton, Dorothy  
Emery, Catherine  
Emshoff, Patricia T.  
Engel, Arthur  
Engelhardt, Arthur  
Engelhardt, Dorothy  
Engler, Elizabeth  
Esposito, Theresa  
Faresich, Barbara  
Faresich, Robert  
Feinhals, A.  
Fenton, Diane  
Fett, Henry & Elizabeth  
Fillipelli, Larry  
Fitterman, Richard L.

Flach, Cathy  
Flora, Peter & Jane  
Flora, Ruth & Edward  
Frangello, Michael  
Frank, Helen & Henry  
Freda, Frances  
Frock Jr., Roy F.  
Ftera, Constance  
Gallo, Ann  
Gambino, Peter  
Garda, Mildred  
Gasparetto, Janet  
Germinario, Regina M.  
Giaziosi, Gaye  
Giegold, J.  
Glaser, Alfons  
Glaser, Alva  
Glennon, Peggy  
Gomes, Carla M.  
Grabusnik, Rosalie  
Grip, Patricia & Richard  
Grutkosky, Helene  
H. Steven (Little Ferry)  
Hallam, Darlene  
Hallam, Grace  
Hassig, John  
Healey, David  
Healey, Joseph W.  
Hendrick, Raymond R.  
Herman, Shirley & Joseph  
Hodges, Anne  
Hoehl, Elise B.  
Hochl, Nelson  
Hoffman, Emily & Fred  
Holcik, Betty  
Howansky, George  
Howansky, Marie  
Hubel, Carl  
Iervolino, Cecilia  
Jakubowski, Stanley  
Jirak, Emily  
Jirak, John  
Joyce, Mr. & Mrs. Keith  
Just, Charlotte & Leon Sr.  
K. Mary (Little Ferry)  
Kafafian, Sophie  
Kappmeier, Hilda

Kaye, Alma A.  
Kaye, William F.  
Kennedy, Priscilla  
Kern, Martin & Renate  
Kloo, Loretta  
Knight, D. Natalie  
Komenda, Frances O.  
Kopcha, Marion  
Kosman, Michael  
Krobatsch, Edwin B. & Rita  
Kubicek, Florence  
Kurz, Josephine  
La Mue, Kathy  
Lange, Helen M.  
Larkin, James E.  
Lawlor, Agnes  
Lawryczenko, Anna  
Leiser, Edwin A.  
Leiser, Lucille  
Leo, Michael  
Lia, Joan K.  
Liberti, Amos A.  
Lipnicki, Joseph  
Liuzzi, Joel  
Lo Balbo, Salvatore  
Loebel, Harriet  
Loers, Carmela  
Loers, Robert W.  
Long, David B.  
Luhrmann, Arlene & Arthur  
M. Mary (Little Ferry)  
Maddaluna, Ann  
Mangelsdorf, Marge  
Mangino, Cynthia  
Mangino, Joe  
Mangino, Joseph  
Mangino, Karen  
Mangino, Scott J.  
Marino, Bernadine  
Marra, Brigetta  
Matheussen, Alice  
Mavus, Ruth H.  
May, Dolores A.  
Mazanec, Frank J.  
Mazanec, Josephine  
McAdam, Charles & Catherine  
McGilly, Edna

McLaughlan, Neil  
Mertz, John C.  
Meyer, Helen  
Meyer, Sonia  
Mills, Jessica M.  
Molloy, Kathleen  
Monforte, Anthony  
Monforte, Mary  
Morrow, C.O.  
Morrow, Jay  
Mott, Laura  
Murray, Edith  
Murray, George  
Muttillio, Anthony  
Muttillio, Ruth  
Nass, Della  
Neilsen, Lee  
Nepil, Blanche  
Neu, Mary E.  
Nichadowicz, E.  
Nicolo, Pasquale  
Nicolo, Veronica  
North, Theresa  
North, Wallace  
Nurge, Robert & Marie  
O'Keefe, John  
O'Neill, Janet  
Oziemblo, Stella  
Pacella, Jennie  
Paczkowski, Mrs. Hedwig  
Palamone, Michael  
Palmerini, Lola  
Palmerini, Silvano  
Pankowicz, Helen  
Paparella, G. & Teresa  
Paparella, Teresa  
Passante, Joan  
Paytas, Katherine  
Perotti, Congetta  
Pieroni, Katie  
Pinelli, Elizabeth  
Pizzuti, Ed  
Pizzuti, R.D.  
Platten, Ann  
Porcaro, Donald  
Porr, Rose  
Prahm, Marie

Preinfalk, Catherine  
Pulak, Helena M.  
Puleo, Olga S.  
Puleo, Paul  
Quina, Francine  
Quina, John  
Quina, Vera  
Quirico, Phyllis  
Raimondo, Mary Ellen  
Rapella, Kimberly  
Raso, Agnes  
Raspantini, Edna  
Reichlen, Mary C.  
Reinke, John J.  
Riccio, Hedwig  
Rizzo, H. & Phyllis  
Roes, J.  
Roes, John  
Romano, Anna & George  
Romano, Frank & Theresa C.  
Romano, Mildred  
Romano, Nancy  
Rossi, Julia  
Royka, Steven  
Russo, Joseph  
S. James C. (Secaucus)  
Sacchi, Eleanor M.  
Santi, Emma  
Sarraf, John  
Sarraf, Teresa  
Sauer, June & Henry G.  
Schoch, Jr. Charles  
Schoenrock, Claire  
Schoenrock, Constance  
Schwedhelm, John C.  
Sciancalepore, Ralph  
Sesselmann, Lillian  
Sheppard, Frances  
Simsek, Ruth  
Sirotek, Mildred  
Soojian, Debra  
Standler, Dorothy  
Stauble, George J.  
Stauble, Joan  
Stauble, Joseph  
Sterlace, W. & Isabella  
Stern, Elizabeth

Sturmfels, Gregg  
Sturmfels, Joan  
Sturmfels, William  
Suhr, Mr. & Mrs. Richard  
Supik, John  
Supik, Wilma J.  
Svec, Eleanor F.  
Swagger, Frank G.  
Tashjian, B.  
Tebesceff, D.  
Tebesceff, Giacomo  
Tiboni, Johanna & Joe  
Treitner, Richard J.  
Tripodi, Domenica  
Tripodi, Rocco  
Turi, Ann  
Tyson, Catherine  
Vagts, Harriet  
Valentin, Allison  
Vallejo, Gloria & Lucas H.  
Van Miert, Peter & Edith  
Vartanian, Gloria  
Veith, Doris  
Verdi, Barbara  
Verdi, Jon  
Vessillo, Emily  
Viele, Thomas  
Von Atzingen, Anna  
von Gerichten, Theresa  
Vozeh, Evelyn  
Vrecenak, Marie  
Wasko, Michael  
Wasyle, Dorothy, George & George G.  
Weber, Gladys A.  
Weddle, Margaret  
Wedral, Otto J.  
Weeks, Eileen  
Weeks-See, Gertrude  
Weichenrieder, Inge  
Weichenrieder, Josef  
Weigelt, Debra A.  
Weingartner, Laura & Bill  
Westphal, Marie  
Whalen, Anita  
Widman, J.  
Wildstein, Jacqueline  
Zabransky, M. & Blanche

Zeppieri, Madeline  
Zibowich, Wanda  
ILLEGIBLE SIGNATURES:  
Illegible-1  
Illegible-2  
Illegible-3  
Illegible-4  
Illegible-5  
Illegible-6  
Illegible-7  
Illegible-8

**14.2.14 Form 14 Names**

|                          |                             |
|--------------------------|-----------------------------|
| Akin, Michelle           | Counterman, Jesse           |
| Albritton, Phyllis       | Craft, Stacy                |
| Alexander, Ericka        | Crosley, Carolyn            |
| Alline, Jennifer         | Davis, Mary Jane            |
| Ambrosio, Richard        | Davis, Sharyn               |
| Anderegg, Winnie         | De Stefano, Rhonda          |
| Arns, John               | Deaver-William, Doris       |
| Aronoff, Marcia          | Deleon, G.V.                |
| Aufderhar, Joan          | Dietsch, Niko               |
| Bacon, Jessica           | Donovan, Marguerite         |
| Balsley, Roy             | Dorando, Brandy             |
| Bateman, Joe             | Dorsey, Alice               |
| Batson, Virginia         | Dymits, Lee                 |
| Beetar, Joe              | Estes, Anne                 |
| Bellinger, Michelle      | Fallon, Elizabeth           |
| Bernhardt, Ray           | Felder, Chris               |
| Beverly, Gail            | Fennell, Regina Mae         |
| Black, Andy              | Franz, Robert               |
| Blumeneau, Audrey        | Frint, Jim                  |
| Bobowski Sr., James      | Furr, Richard               |
| Bobowski, Bobbie         | Gaignard, Karen             |
| Bobowski, Jim            | Galaz, Richard              |
| Bolyai, Melani           | Gale, Barbara               |
| Bonardi, Joan            | Geanuleas, Sharon           |
| Boscole, Jeff            | Germann, Beth               |
| Boucher, Michael         | Gertsch, Steve              |
| Bragg, Betty             | Glover, Sally               |
| Brennan, Joy             | Graff, Eric                 |
| Brennan, Sheila          | Greuer, Friederike          |
| Brown, Carol             | Griffin Alex                |
| Bucci, Anthony           | Griffith, Barbara           |
| Budd, Terry              | Grove, Dianna               |
| Bunning, Martin          | Haj-Broussard, Michelle     |
| Burt, Janet              | Hallberg, Judith            |
| Butler, Tom & Lois       | Hamilton, Helen (Montclair) |
| Caffrey, Frank           | Hampson, Donna              |
| Campbell, Eric           | Hancock, Clarence           |
| Carpen, Mitch            | Hardy, Robin                |
| Carrion, Jessica         | Harp, Rene                  |
| Carroll, Michael         | Hayes, Matthew              |
| Ceravolo, Silvia         | Heller, Elizabeth           |
| Chalup, Amy              | Hemm, Lois                  |
| Christensen, Barbara     | Hennessy, David             |
| Ciampo, Catherine        | Herman, Keith               |
| Cifuentes-Gramajo, Luisa | Herman, Wendolyn            |

|                       |                       |
|-----------------------|-----------------------|
| Hlavka, Joy L.        | Massoudi, Darius      |
| Hochheiser, Elaine S. | Matthews, D. Aaron    |
| Holzman, Lew          | Maxwell, Jamaica      |
| Holzman, Neil         | McGuire, Matthew      |
| Hornyak, Kelley       | McNally, Ann          |
| Housel, Lynn          | McNamara, Amy         |
| Howell, Wendy         | Meekin, Barbara       |
| Igo, Janet            | Miles, Becky          |
| Jacob, Kathleen       | Moller, Helen         |
| Jacobi, Veronica      | Moore, Jim            |
| Jakubik, Matt         | Morrissey, Joseph     |
| Jeffers, Alexander M. | Moscicki, Paul        |
| Johnson, Leah         | Muller, Charles J.    |
| Kastner, Audrey L.    | Murphy, Jessica       |
| Keith, Sharon         | Nance, Julie          |
| Kekoa, Rosemary A.    | Novotny, Pamala       |
| Kelson, Marie A.      | Paisley, Anne         |
| Kimbrell Jr., Ron     | Palamenti, Alice      |
| King, S. Jon          | Palmer, Brent         |
| Klaus, Diana          | Pang, Benton          |
| Kornfeld, Laurel      | Panossian, Sophie     |
| Kowalik, Tim          | Paris, Noel           |
| Kraehenbuehl, Carole  | Partin, Beth          |
| Kramer, Rachel        | Penney, Sheila        |
| Krammer, Ruth         | Pepper, Philip S.     |
| Krieger, Gerald       | Plant, Stacey         |
| Kuechenmeister, Mark  | Plessner, Laura       |
| Kulesa, John          | Poissant, Barbara     |
| Lane, Earl            | Prager, Susan         |
| Laufe, Martin B.      | Procanik, Nancy       |
| Lee, Hamilton         | Putnam, Kathleen      |
| Lee-Melk, Yang Yi     | Rabinowitz, R.D.      |
| Lerman, Elizabeth     | Ramsey, Kevin         |
| Lichtenstein, Allan   | Reinhardt, Robert     |
| Lillard, Jason        | Rengifo, Beatriz      |
| Ling, Chris           | Richardson, Kate      |
| Loiola, Lori          | Riley, Mary M.        |
| Lopez-Ibanez, Joanne  | Rinsma, N.L.          |
| Lovejoy, Deborah      | Ristine, Sarah        |
| Lovell, James         | Rivera, Diana         |
| Macaluso, Nicole      | Romero, Sheila        |
| Magee, Mary Jane      | Rorrer, Virginia      |
| Mahar, Timothy        | Rosenstrauss, Maurice |
| Maloney, Greg         | Rozanski, Raphaela    |
| Mantz, Jo Anne        | Rudd, Matthew         |
| Markley, Marjorie     | Rusch, Vincent        |
| Marks, Kelly          | Sailer, Christian     |

Salberg, Elyse  
Sandomierski, Rob  
Schafer, Helen  
Schlachter, Adam  
Schutz, Christopher  
Scott, J.C.  
Scott, Les  
Shore, Irving  
Shumway, Darice  
Sienkielewski, Chris  
Silkes, JoAnn  
Sims, Sandra  
Skalski, Suzanne Schafer  
Sleasman, Wendy  
Sloan, Robin  
Smith, Barbie  
Smith, William  
Smyle, Sara  
Spears, Mandi  
Stackhouse, David  
Stefferd, Renee  
Steinberg, Mia  
Stires, Anne  
Stires, Quint  
Stoddard, Donna  
Stoltzfus, Mike  
Stone, Patrick  
Stroud, Sue  
Sushil, Bill  
Sventy, Robert  
Thomson, Joy  
Torres, April  
Trivisonno, Susan  
Vila, Carole  
Von Gonten, Irene  
Vorters-Leggett, Demetria  
Wallace, Nancy  
Weishar, Charles F.  
Weissmann, Karl  
Weitzel, Tim  
Wells, Frank A.  
Wersching, Joseph  
Weum, Kristoffer L.M.  
Whelan, Dennis  
Whitson, Edith  
Wicks, S.M.  
Wilkenfeldt, Yancy

Willard, Sally  
Wood, Steve  
Wrana, Kimber  
Zampese, Lois  
Ziegler, Tristan  
Zinn, Robert



**14.2.15 Form 15 Names**

Abbott, K.A.  
Adrian, Rita F.  
Agresta, Charlotte & Joseph  
Albina, M.  
Albro, Anne C.  
Allen, Charles  
Anema, Barbara, E.  
Antoniotti, Umberto  
Appleman, Sandra  
Bacik, John  
Bai, Nina  
Bailey, Angela & Raymond  
Balala, Karen  
Balala, Michael W.  
Bassani, Melissa  
Ben-David, Barbara  
Boggett, William  
Boldt, Agnes  
Bosi, Mr. & Mrs.  
Brogn, A.  
Brunda, Janet  
Burghardt, Philip & Barbara  
Burke, William  
Byrne, Gerard M.  
Calafatello, Chris  
Campos, Sandra & Hector M.  
Cappiello, George & Marilyn  
Centrella, Ralph G.  
Cerasuolo, Sandra & Wallace  
Chambarry, Christ  
Chambarry, Tammy  
Chapman, Ralph R.  
Coletta, Miriam  
Connors, Peter  
Conway, Loretta B.  
Cornelius, Donna  
Dale, Tracy  
Daley, George E.  
Dalton, Debbe  
DeFalco, Victoria  
DeFilippis, Michael  
Demarest, John W.  
Demarest, Michaelynn  
DeRobertis, Angelo  
Di Modugno, Giuseppe

Dickinson, Roy  
Dietzel, Elizabeth A.  
Dittmar, Mr. & Mrs. Robert  
Driscoll, Marie  
Dwyer, Dennis & Laura  
Eckhardt, Rosanna M.  
Feliciano, Joyce  
Ferrone, James M.  
Finn, Thomas  
Florio, Daniel & Geraldine  
Flowers, Dena  
Forman, Jack & Helene  
Fortunato, Beatriz & Michael  
Fox, Emily  
Francis, Dorothy M.  
Gadaleta, Dorothy  
Gagliardi, Michael  
Gambino, Mr. & Mrs. Peter  
Garcia, Joyce  
Gentile, Renee  
Gerding, Henry  
Gill, Dennis L. & Linda M.  
Giuliano Jr., Eugene  
Goode, Mary Jane  
Gordon, Jean C.  
Grieco, Florence  
Guglielmo, Sabino D.  
Guieb, Leo A. & Rita R.  
Gurzo, Joseph  
Haufe, Richard H.  
Hazelgreen, Donna & Michael  
Herbert, Theresa  
Herold, Noreen V.  
Hester, Celia  
Hrbek, Allison M.  
Ingino, Dolores  
Irizarry, E.  
Jackson, Christine & Paul  
Jehle, Lisa  
Kaiser, Nita  
Kandel, Robert  
Karavitis, Stephen & Roseann  
Kaufer, Wilbur & Elizabeth  
Kolankowski, Julia J.  
Kosa, R.J.

Kostroun, William  
La Spina, Ross  
La Valla, Arthur A.  
Lamboy, L.  
Lange, Helen M.  
Lanzetti, Patricia  
Lawryczenko, Helen  
Le Gar, August C.  
Lenge, Lorraine & Joseph  
Lepkowski, Laura  
Losurto, M. and Angela  
Luhrman, Eleanore  
Mackay, Lynne S.  
Mahlebian, Lynn  
Malaney, Marion & Richard  
Mariani, Frank  
Marshall, William  
Martinez, Armando  
Martinez, Maria  
Mattera, Philip  
McLean, Richard  
Mele, Frank & Lori  
Mercadante, Catherine  
Mezzina, Joe & Barbara  
Mickendrow, John & Theresa  
Mikolay, A.R.  
Miller, I. A.  
Millo, Frances  
Minotti, Wayne J.  
Monnett, Michele  
Monteleone, Angela  
Morro, Cindy  
Moskel, Paul & Jeff  
Murphy, James  
Murray, Lillian & John  
Nass, Della  
Nichols, Peter  
Palmerini, Silvano  
Paren, Lynne A.  
Pearlman, Mickey  
Pellecchia, Vincent J. & Elizabeth  
Peluso, Judy  
Pera, James & Lorraine  
Phillips, Joan  
Porta, John E.  
Proodian, Mr. & Mrs. S.  
Ptak, Richard

Purrelli, Georgia  
Quinzer, Claire & Matthew G.  
Racanati, Mr. & Mrs.  
Radtke, Alexandra  
Raspantini, Edna  
Rayfield, Marvin  
Remes, Vera  
Reyes, Patricia  
Reynolds, Patrick  
Ribik, Kathleen  
Riley, Claire L.  
Rogan, Michael J.  
Rossi, Rosalie Rotundi  
Rostan, Kim E.  
Rotondi, Lawrence  
Rovito, Adele & Andrew  
Rubin, Harold  
Russo Sr., Harry A.  
Scalato, Salvatore  
Scarangelli, Antoinette  
Schalhoub, Jennifer & Paul  
Schraeder, Herbert & Dolores  
Schwedhelm, Linda  
Schwedhelm, Raymond  
Scioli, Josephine  
Shaffer, Donald E.  
Shaffer, S.L.  
Sharpe, Margaret & Ray  
Sinclair, Brian  
Slutzky, Arthur  
Slutzky, Sheila A.  
Smith, Edna  
Sobolewski, Geneveive  
Stewart, Catherine  
Stewart, William  
Stika, Eugene W. Harriet H.  
Sullivan, Robert  
Supik, John  
Surrano, Mr. & Mrs. George  
Svec, Eleanor F.  
Tedeschi, Anthony  
Tedeschi, Nancy  
Termini, Robert  
Tovar, Jorge  
Tristano, Joseph  
Valentine, Elizabeth  
Verdi, Barbara

Vernicik, V.E.  
Vesely, Theresa K.  
Volpe, Elaine  
Washburn, Christine E.  
Weber Sr., John O.  
Weber, John  
Weeks-See, Gertrude  
Wetterhahn, Dawn  
Whitney-Kosa, Idamay  
Wiener, Susan B.  
Yamrick, Ellen  
Zienkiewicz, Evelyn, Kim & Robert

**14.2.16 Form 16 Names**

Abel, Helga  
Abrahamsen, Matthew  
Abrams, Shirley R.  
Abramsky, Carol  
Acadia, Phyllis  
Accurso, Judy  
Ackerman, Andrea  
Adamo, Patricia  
Adams, G.S.  
Adams, Margaret B.  
Adams, Ruth E.  
Adelman, Howard C.  
Afton, John L.  
Agar, Lily B.  
Agnelli, Jacqueline  
Agnew, Betty L.  
Aigner, Ruth  
Aitken, Laura T.  
Akers, Julie  
Akoulitchev, Harriet  
Albenda, Pauline  
Alberghini, Deedra  
Albert, Barbara  
Albert, Eileen & Jack  
Albertine, Elsie F. & Margaret  
Albrecht, Carol L.  
Alcorn, Gerald  
Alexander, Ellen P.  
Alexy, Diane  
Allahverdi, Lynn  
Alland, Sonia  
Allen, Carole A.  
Allen, Joanne H.  
Almenas, Patricia  
Altman, Elizabeth  
Altman, Jane  
Altman, Stanley F.  
Ambrose, Paul  
Amster, Clare  
Anderson, J.  
Anderson, Lisa  
Anderson, Neal  
Andrew, Barbara J.  
Anes, Minnie  
Angelista, Michele

Angowski, Jean  
Angulo, Cheryl  
Anson, Robert A.  
Apostol, Anna N.E.  
Appel, Charles F.  
Appleyard, Gwen M.  
Arenas, Joseph  
Arjoumandi, Helene & A.  
Ash Jr., John F.  
Athearn, Norma  
Atherton, Richard F.E.  
Aufiero, Thomas  
Austin, Kenneth R.  
Aybar, Ivonne  
Azzu, Joan G.  
B., Julie (Lynbrook)  
B., Kenneth (Glendale)  
Bachman, Dorothy  
Bachu, Theresa, Keshoir & Cody  
Bacich, Donna  
Backerman, Gilbert H.  
Bagwell, Laura  
Bagwell, Lisa Ann  
Bagwell, Rosemary  
Bailey, Cliff  
Bailey, Robert J.  
Baker, Carole L.  
Baker, Lydia  
Balfour, David  
Bamberger, Christine  
Bancroft, Elizabeth D.  
Bankey Jr., Earl F.  
Banks, Lynda  
Bantor, Armand, Adrian, & Eva  
Barad, Janet  
Baran, Lisa  
Barbier, Monika  
Barbour, Thomas  
Barron, Gertrude J.  
Barry, Joseph G.  
Barry, Marina  
Bassat, Candace R.  
Bastian, Joan  
Bates, Lucile M.  
Bathgate, T. Pamela

|                            |                           |
|----------------------------|---------------------------|
| Battersby, Lois            | Biondi, K. Monica         |
| Battisti, Margaret L.      | Bizzarri, Rosalie         |
| Bauer, Karlene             | Blaine, Doris             |
| Bauereiss, Kurt            | Blair, Nicholas A.        |
| Baumann, David D.          | Blair, R.M.               |
| Baxter, Lestor             | Blanchard, Joseph P.      |
| Beavers, Sandra R.         | Blank, Bernard            |
| Beck, Julie                | Blinder, Lila             |
| Beck, Lois                 | Block, David              |
| Becker, Anne               | Bloomfield, Blanche Z.    |
| Becker, Charlotte          | Bluestone, Mimi           |
| Becker, Elizabeth H.       | Blum, Paula C.            |
| Becker, Janet              | Blumborg, Harvey          |
| Bccker, Louise             | Blume, Evelyn A.          |
| Beels, Margaret R.         | Bogart, Clementine        |
| Beer, Edwin & Florence     | Bogden, John D.           |
| Begendorf, Margaret        | Bohler, Curtis D.         |
| Beguín, Maria & Steve      | Boland, C.H.              |
| Behr, Donald J.            | Bonczek, Stanley R.       |
| Beim, Michele              | Boomer, Dorothy P.        |
| Bekaert, Lucille F.        | Boosler, M.               |
| Belden, Robert & Rachel    | Borden, Sharon L.         |
| Bellezza, Paula L.         | Borea, Phyllis Gilbert    |
| Belmont, Ira               | Borin, Muriel             |
| Beltramini-Pincus, S.      | Boris, Phyllis F.         |
| Benny, Janet               | Bork, Joan E.             |
| Bents, Kevin               | Borro, Mike               |
| Benz, Danielle             | Borsellino, Margaret      |
| Berg, Barbara              | Bossert, Ingeborg D.      |
| Berg, G.                   | Bouquio, Barbara          |
| Berger, Kathleen           | Bourbeau, Robert V.       |
| Berinstein, Ronney         | Bove, Patsy               |
| Berke, Aida                | Boyton, Louise C.         |
| Berkowitz, Surriet         | Brackett, Herbert M.      |
| Berliner, Susan            | Bradley, Jennifer         |
| Berman, Ida                | Braga, Karen              |
| Berman, Jesse              | Brager, Mildred           |
| Berry, Douglas             | Brailey, Patricia R.      |
| Bertalan, Fred             | Brascia, Domenic F.       |
| Bertles, Linda             | Brechnner, Ruth           |
| Bertolini, Madalen         | Brennan, Mr. & Mrs. David |
| Betner, Irene B.           | Bresnick, David           |
| Beveridge, Frederic Rudell | Breuer, Rosemary          |
| Beverly, Linda L.          | Brickhouse, Farrell       |
| Biamonte, Linda            | Brickman, Lionel          |
| Bielski, Donna             | Briggs, Anya              |
| Biggs, Myra                | Bright, Diane             |

|                                |                              |
|--------------------------------|------------------------------|
| Bristol, Nancy D.              | Campora, Marion A.           |
| Britz Jr., Peter               | Candelario, Melania          |
| Broadfoot, Jessie G.           | Cantor, Lynn-Jo              |
| Broadwell, Robert E.           | Capasso, Geraldine           |
| Brooks, Bradd                  | Capazzelli, Rose             |
| Brooks, Pauletta               | Caponigro, Dara              |
| Brosterman, M.                 | Caporrino, Anthony           |
| Brounell, Mr. & Mrs. Lewis     | Capozzelli, J.               |
| Brown, Caroline & Samuel       | Capuya, Miru                 |
| Brown, Nancy                   | Cardella, Janet              |
| Brown, Patricia A. & Bruce N.  | Cardenas, Aubyn              |
| Bruder, Patricia Janis         | Carey, Alan R.               |
| Bruenn, Carolyn V.             | Carey, Doris L.              |
| Brussat, Mary Ann              | Carlo, Frank                 |
| Brustein, Ethel                | Carlsen, Mrs. William L.     |
| Buergin, Christa E.            | Carlton, Joseph              |
| Bugland, Patricia              | Carney, Eugene F.            |
| Buhse, Matthew Cabezas         | Carpenito, Edward E.         |
| Bulley, Raymond M.             | Carpenter, Elizabeth         |
| Bunce, Betty Lee               | Carpenter, Kaye A. & Merrill |
| Bungert, Marylou & John        | Carpenter, William           |
| Bunish, Christine              | Carroll, Thomas D.           |
| Bunting, Natalie               | Carta, David                 |
| Buonagura, Edward              | Cartelli, Thomas             |
| Buriani, Michael               | Caruso, Barbara              |
| Burke, Barbara D.              | Cary, Katherine F.           |
| Burke, Gwen                    | Casey, W. David              |
| Burke, Timothy C.              | Castellon, Librada           |
| Burns, Audrey S.               | Castles, Patrick J.          |
| Burns, Esther & John R.        | Catalano, Tom & Cathy        |
| Burston/Danue, Doreen          | Cater, Jean                  |
| Bush, Sally R.                 | Cathers, Millie              |
| Butler, Linda                  | Catino, Carl                 |
| Butler, Merrily                | Cauvin, Linda                |
| Buxbaum, Frederick D.          | Cava, Susan                  |
| Buzas, Robert                  | Cavanaugh, Doug              |
| Byrne, Linda                   | Celeste, Mary                |
| C., Charles (New York City)    | Celotto, Margaret            |
| Cabarle, Betty                 | Ceruti, Theresa              |
| Cadra, Henry                   | Chagnon, Lucille T.          |
| Calfa, Lillian F.              | Chalmers, Barbara            |
| Callan, Carmen L. & William B. | Chan, Yiu Tong               |
| Calos, Elaine                  | Chandler, Carol              |
| Calwhite, Gary                 | Chang, Emily                 |
| Campanella, Joseph             | Chappell, Donald E.          |
| Campbell, Robert D.            | Charles, Mrs. Jay            |
| Campo, John                    | Charney, David               |

Charney, Ted  
Charydczak, Neal P.  
Chasse, Dennis  
Chaudhary, Laura J.  
Chelius, Michelle M.  
Cheroff, Melanie  
Cherot, Adolph  
Cherry, Lorinda  
Chess, Nathan  
Chew, Connie  
Chislock, Virginia  
Chittenden, Cheryl A.  
Chodosh, Melba  
Christensen, Maureen  
Christiansen, Patricia A.  
Chu, Cindy  
Chutick, Andrea  
Ciaccio, Marie  
Cichurski, Diana J.  
Cieslik, Stephanie  
Cifarelli, Christine  
Cincotti, Joen  
Cioffari, Philip  
Ciulla, Philip  
Clair, Gertrude  
Clark, Helen M.  
Clark, Jacqueline Snell & Robert B.  
Clark, Robert G.  
Clayton, Judith  
Clemens, Rosemary A.  
Clementz, Raymond G.  
Clempner, Louise  
Cliff, P.W.  
Clifford, C.N.  
Cliver, Alice K.  
Clunn, Andrew  
Coda, E.T.  
Coggeshall, Mary A.  
Cohen, Deborah A.  
Cohen, Michelle  
Cohen, Sibyl A.  
Cohn, Patricia B.  
Cole, Anne V.  
Colello, Roseann  
Collier, Alyce J.  
Coneys, Brooke  
Connelly, Diana J.

Connolly, Michael  
Connor, Jack  
Convery, Charles  
Conville, James  
Cook, Ronald  
Cooper, Jeffrey J.  
Corbett, Grace G. & Donald F.  
Coreli, Rhio H.  
Cormier, Dawn S.  
Costello, Patricia  
Cotterell, Karen  
Cours, Barbara J.  
Cousins, Theresa A.  
Cox, Johanna E.  
Cronick, Mary  
Crooks, Margaret J.  
Cross, Regina B.  
Crouse, Grace K.  
Cucchiarelli, Maryanne  
Cullen, Joan M.  
Cullom, Marilyn  
Cunningham, Bob  
Cunningham, Janette  
Curtis, John  
Czar, Andrew  
D., Patrick H. (New York City)  
D'Agnelli, Patricia M.  
D'Errico, Victoria  
Dalferes, Clay  
Dalfol, Renee  
Dalton, Carol  
Dandignac, Patricia  
Danis, Leslie  
Darr, Benjamin J. & Anita L.  
Daugherty, Barbara  
Davidson, A.S.  
Davidson, Roger C.  
Davies, Barbara H.  
Davies, J.  
Davies, William  
Davis, Claire  
Davis, Francis  
Davis, John H.  
Davis, Marylee  
Davis, R.  
Davis, Ted  
Davis, W. Terry

De Cecco, Rosemary  
De Cicco, Gene & Rose  
De Haven, Anne R.  
De Kock, Yvonne  
De Lisle, Christine  
De Luca, Jean  
Deane, Cecilia  
Dec Jr., John G.  
Deese, Rupert  
DeFalco, Eloise  
Deile, William A.  
Dell'Aquila, Lori F.  
DeLuccia, Marcia J.  
Demidenko, N.A.  
Dengler, Allegra  
Dennihiy, David T.  
DePietro, Ann  
DeRemer, Michelle  
Derezeas, Georgia  
Deroche, Claire  
DeSmedt, Sandra  
DesRochers, David  
Detroia, Lois A.  
Deutschman, A.D.  
Di Giovanni, Agnes  
Di Marco, Helen B.  
Dib, Eileen  
DiBiase, Bruce  
Dickbauer, Othmar  
DiGiacomo, Jody  
DiGiorgio, Rose  
Dolbow, Suzan F.  
Dolise, Frances  
Donath, J.R.  
Donnelly, Michele  
Donnelly, Philomena A.  
Donovan, James  
Donovan, Margaret  
Doren, Judith  
Doring, Daniel M.  
Dorsky, Julian  
Doubleday Jr., Charles  
Douglas, Janet  
Downs, Lisa M.  
Drachman, John B.  
Drescher, Muriel  
Drew, Florence A.

Drogheo, Sara Crawford  
Dubinsky, Joseph D.  
Dublnett, Leah S.  
Duboff, Elizabeth  
DuBois, Maria Seton  
Ducca, Mary E.  
Dudek, Andrew  
Dudley, Anna B.  
Duffey, John T. & Betty A.  
Duffy, Edward & Julia  
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Dunay, Irma  
Duncan, Angela  
Dunn, Patricia A.  
Dunn, Vivian  
E., Elias (Irvington, NY)  
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Eagle, Peggy  
Eastwick, A. Lane  
Eber, Linda J.  
Eckerman, Donald R.  
Eckert, Robert J.  
Eckhardt, Geraldine  
Edgerton, Stephen A.  
Edman, Austin  
Edman, Mabel  
Edmunds, Susan T.  
Edwards Jr., Mills C.  
Edwards, Jennifer A.  
Edwards, Lester  
Edwards, Nina  
Efron, Mrs. M.  
Efthiniades, Ellen & Constantine  
Eifert, Kay S.  
Eisenberg, Michelle  
Eisenberg, Mr. & Mrs. Daniel  
Ellerstein, Bruce  
Ellsworth, Janice  
Ely, Richard  
Emelianoff, Beatrice  
Engles, Faye  
EntriKin, Sara  
Epstein, Catherine  
Eron, Andru C.  
Ersfeld, William & Dorothy  
Escott, Dorris M.  
Esposito, John J.



Essbach, M.  
Estepan, Louise O.  
Etlisch-Milsulka, Marianne  
Ettinghausen, Elizabeth S.  
Euler, Aline  
Evans, Lisa N.  
Evans, Sheldon  
Everoski, Mr. & Mrs. Chester  
Ewen, Susan  
Eyland, Barbara  
F., Andrew (New York City)  
Fabbri, Dori  
Falciani, Pamela F.  
Falkenburg, James  
Falkinburg, Jane  
Fanelli, Edward  
Fanger, Frances  
Farnham, Susan  
Faro, Joseph  
Farrer, Robert J.  
Farruggia, Julius E.  
Fash, David  
Faulkner, Elaine  
Fayman, Alvin  
Fazekas, Jeanette  
Fazio, Carmela T.  
Fazio, Michael A. & Nancy  
Feinbloom, Jacqueline  
Feinman, Barbara  
Fekete, Tibor  
Felder, Elsie  
Feldman, Judith  
Feldman, Lawrence  
Fellheimer, Gail  
Fernekeess, Elizabeth  
Ferreri, Salvatore  
Finan, Cathleen M.  
Fine, Elinor T.  
Finneran, G.  
Finnerty, Robert J.  
Firstbrook, Roger B.  
Fisher, Allen  
Fisher, Charles D.  
Fitzpatrick, Daniel  
Flagler, J.  
Flake-Bunz, Colette  
Flanagan, John C.

Fleischer, Peter B.  
Fleischman, Glenn  
Fleischner, Maya  
Flemer III, William  
Floresta, Marianna  
Flynn, D.F.  
Flynn, Denise  
Flynn, Patricia  
Fodor, Eldon S.  
Foley, Anne A.  
Foley, Elsie  
Foller, Frederic & Marjorie  
Foner, Elissa  
Fong, Jen  
Forcanser, Henrietta C.  
Ford, Emilie  
Formen, Helene  
Forrester, Lynne  
Fortenbaugh, Constance D.  
Fortier, Marguerite  
Fortunato, Robert E.  
Foster, John & Marion R.  
Fowler, Katherine  
Fowler, Margaret E.L. & Morgan  
Franck, Jane P.  
Frank, Barbara C.  
Frank, Ernest  
Frankel, Elizabeth  
Frankel, Erika  
Franse, Louise  
Freda, Gretchen H.  
Fredenthal, Ruth Ann  
Frederick, Barbara J.  
Fredericks, Ann Marie  
Freestone, Beverly  
Freides, Thelma  
Freiman, Erika A.  
French, Doreen  
Freundlich, Roza  
Fried, Debra  
Friedman, Carolyn  
Friedman, Richard I.  
Fries, Cecelia  
Frimer, Stewart J.  
Fronapfel, William  
Fulton, John  
G., Graham (Brooklyn)

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Gabriel, Janice A.  
Gainer, Isaac & Celina  
Gallagher, Kathleen  
Galligan, Leslie  
Gallo, Patricia  
Gambino, Grace  
Gameles, Pamela  
Gamper, Gisela H.  
Gann, Mitzi-Ann  
Gannon, Ned  
Gantly, Judith  
Garcia, Ronni  
Gardner, Carin & Sheldon  
Garry, Lorraine Gagliardotto  
Gartner, Stephanie  
Garvey, Maureen M.  
Gasparre, Nikki  
Gates, Albert J.  
Gattola, Fred  
Geddes, Edward  
Geller, Karen F.  
Gentile, Allison  
Gentile, Annmarie  
George, Diane  
Germann, Patricia E.  
Gerriets, Rose  
Gevas, Cordelia  
Giannini, Rose Anne  
Gibson, Mary  
Giejda, Cynthia L.  
Gifford, Bess  
Giganti, Victor  
Gignoux, Jane Hughes  
Gilbert, Suzanne  
Giller, Evan  
Ginsberg, Rae  
Ginter, Eleanor & Albert  
Giuliano, Mia  
Glass, Bernard & Gloria  
Glass, Stacy  
Glassner, Sheila  
Glenn, Marian  
Glenn, Max G. & Anne  
Glickman, Mae O.  
Glickman, Michael  
Gloskoska, Mary S.

Glotzer, Marguerite  
Gluck, Frances T.  
Gluck, Seymour  
Gluckman, Thomas  
Goble, Marjorie K.  
Godenzi, John C.  
Goellner, Judith A.  
Goldberg, Muriel  
Golden, Rose M.  
Goldfarb, Lisa M.  
Goldman, M. J.  
Goldman, Robert D. & Nora  
Goldman, Stuart  
Goldsmith, Sidney  
Goldstein, Eric W.  
Goldstein, Gina  
Goldstein, Janice  
Gollinge, Walter  
Goodman, Robert F.  
Gordon, Irene & Richard  
Gordon, Rebecca  
Gordon, Susan  
Gorton, Rex  
Goulart, Diane  
Gove, Eliyahu & Blair L. Rush  
Grace, Joyce A.  
Grad, Frank P.  
Graham, Dolores J.  
Graham, Jean  
Granat, Stanley J.  
Grano, Elizabeth  
Granstelli, Helen M.  
Grappel, Marc  
Graul, Jane M.  
Gray III, Joseph H.  
Grecco, Frances  
Greebel, Mrs. Joseph  
Greenapple, Lawrence  
Greenberg, Eva  
Greenberg, Marilyn B.  
Greene, Adrienne  
Greene, Alice  
Greene, Claire B.  
Greene, Walter A.  
Greenwald, Eleanor  
Gregersen, Peter  
Gregg, Linda J.

Gregorczyk, Irene  
Gibbon, Anne  
Griffin, Camille  
Grillo, Denise J.  
Grimm, Carrie  
Grissell, Anne E.  
Gronbach, James J.  
Grooms, Mary G.  
Gross, Mark  
Grossman, Adele Mary  
Grotz, Diane E.  
Gruesen, Patricia  
Grulich, Daniel B.  
Gudas, Lorraine J.  
Guertler, Marietta L.  
Guider, Virginia  
Guilden, Paul  
Guinther, Joanna  
Gunc, Robert J.  
Gural, Laura  
Guzman, Carolyn P.  
Guzzi, Louis M.  
Haas, William P.  
Habel, Dorothea  
Habib, Joe  
Hagenbarth, Chet  
Hagovsky, Marion Brady  
Hahn, Yanghee  
Halik, David  
Halliday, Ray  
Handler, Jerry S.  
Hanellin, William  
Hanger, Samuel A.  
Hanlon, Carla M.  
Hansen, Robert M.  
Hariton, Frank J.  
Harmon, Corinna  
Harper, Joan  
Harrington, John W.  
Harris, Stacey  
Harrison, David P.  
Harrison, Linda  
Harrison, Margaret  
Hart, Edward & Joan M.  
Hart, Henry  
Hart, Janette  
Hartley, Timothy K.

Hartman, Helen  
Hartmann, Rose S.  
Hartmann, Ruth P.  
Hatch, Dawn  
Hatcher, Christi  
Hathaway, Michael  
Hauptmann, Regina  
Hauselt, William J.  
Havender, Gloria  
Hazen, Donna C.  
Healy, Mary  
Heckler, Susan  
Heckscher, Marguerite  
Heffner, Eileen M.  
Heitmann, Jeannine  
Helm, Carl E. & Jocelyn B.  
Hennighausen, Amelia  
Henrickson, Kirsten  
Henry III, Donald F.  
Henry, Diane  
Henry, Walter E.  
Herin, Joseph J.  
Hershy, Ingrid  
Hetzl, Gregor L.  
Heuer, Mrs. Bernard E.  
Hickey, Paul G.  
Hinerfeld, Ruth  
Hinzmann, Franziska  
Hios, Catherine  
Hirji, Gulbanoo  
Hirsch, Gladys E.  
Hiser, John A.  
Hodge, Joan  
Hodge, Robert J.  
Hoffman, Charlotte L.  
Hoffman, Dorothea H.  
Hoffner, David S.  
Hoisington, Sylvia R.  
Holcombe, Mr. & Mrs. Robert E.  
Holdsworth, Mary Anne  
Hollander, Deena R.  
Hollerith, Maureen E.  
Holm, Celeste  
Holman, Otilie  
Holt, Charles W.  
Holzer, Adele  
Hooker, Olivia

Hopkins, Anne S.  
Hopkins, Mrs. James  
Hopler, Tracy L.  
Horne, Dorothy P.  
Horne, Lloyd  
Hornick, Margaret  
Hornickel, Suzanne  
Horwick, M.J.  
Horwitz, Howard D.  
Horwitz, Mildred B.  
Horwitz, Ralph  
Horwitz, Bonnie  
Hough, Nancy K.  
Houghton, Alan C.  
Houtrides, EE.  
Hovanec, Ann  
Howard, Linda  
Howard, Lucy  
Hsu, Yuan-Fang  
Hubbs Jr., T.  
Hubert, Joy E.  
Hudson, Carl  
Hughes, D.L.  
Hull, Richard  
Hunkele, Kim A.  
Hunt, Elliot B.  
Hunt, Holland  
Hunt, Michelle  
Hunter, Charles  
Hurley, Linda M.  
Hurlin, William J.  
Hurst, Mabel  
Hurst, Phyllis  
Huston, G.  
Hyams, Anita  
Iannella-Keys, Sharon  
Ignoffo, Matthew  
Imperiale, Yvonne & Peter  
Irgon, Thelma  
Isenberg, William J.  
Iskian, A.  
Isquith, Fannie C.  
Issacs, Marian  
Ivanisevic, Jagoda  
Jablonowski, Eve  
Jackson, Michael G.  
Jacobs, Ruth

Jacobson, Cynthia  
Jacobson, Robert V.  
Jacobson, Steven  
Jakubco, Edward  
James, Barbara  
James, Harriet T.  
James, Laurace  
James, Roberta D.  
James, Sarah  
Janacik, Nilda  
Jancu, Rita  
Janow, Marilyn & Ira  
Jaroslaw, Ilene  
Jeans, Susan  
Jensen, Janet C.  
Jernark, Julie  
Joaquin, Patricia  
John, Anne  
Johnson, Clarence S.  
Johnson, Elizabeth  
Johnson, Elizabeth (Bronxville)  
Johnson, Martin  
Johnson, Virginia E.  
Johnston, Trish  
Jones, Daniel G.  
Jones, Robert J.  
Jordan, Rosalie  
Jorgensen, Maxine  
Josephson, Carl  
Judd, Jeffrey  
Jukoff, Peter  
K., Amy (Staten Island)  
Kach, Alfred W.  
Kalellis,Carolynn  
Kalka, Steven  
Kamphausen, Dorothy E.  
Kanner, Robert  
Kantor, Sidney  
Kaplan, Daniel J.  
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Karloovich, David  
Kaslow, Ann  
Kass, Madeline  
Katz, Estelle  
Katz, Meta  
Kawat, Lois  
Kaye, Alan

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| Kaye, Aleida V.                  | Korbett, Jane M.          |
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| Keane, Ruth                      | Korth, Audrey             |
| Keating, Robert C.               | Kozic, John               |
| Keddie, Wells                    | Kraemer, Lea              |
| Keenan, Mary Ann                 | Krafchick, Jay A.         |
| Kellerman, Leo D. & Elizabeth Z. | Kramer, Laura I.          |
| Kelly, Gwen                      | Krank, Helen T.           |
| Kelly, Richard                   | Kraus, Eleanor            |
| Kennedy, Arlene                  | Kraus, Jeff A.            |
| Key, Sharon                      | Kraysler, Suzanne         |
| Khotin, Tanya                    | Krellberg, Stanley        |
| Kidder, Dierdre                  | Krimmel, Loretta          |
| Kiefer, Ida B.                   | Krippene, Christine       |
| Kieffer, Alisa T.                | Krohn, Nicholas           |
| Killeen, John                    | Kroll, Marc               |
| Kimbrell, M.                     | Krosnick, Max             |
| King, David                      | Krotoff, Oleg             |
| King, Joyce                      | Kuhn, Gloria D.           |
| King, Virginia J.                | Kulwin, Grace             |
| Kinkela, Kenneth L. & Maureen P. | Kuna, John M.             |
| Kirkowski, Lucy                  | Kunze, Lisa E. & Heidi J. |
| Kirkpatrick, Malcolm & Marcia    | Kuo, Sonya                |
| Klass, David                     | Kushner, Lela             |
| Klatskin, Michael                | Kuypers, C.               |
| Klein, Donald                    | Kyros, Kostas             |
| Klein, Edwin S.                  | La Du, K.H.               |
| Klein, Erika A.                  | La Monica, Laurie         |
| Klein, Judith E.                 | La Ronca, Frank           |
| Klein, Laura                     | LaCourt, Massiel          |
| Klein, Leonore                   | Ladas, Alice K.           |
| Klein, Michael A.                | Laffer, Denise Ann        |
| Klein, Robert                    | LaForte, Michael          |
| Kliokis, Constance               | Lalim, Harry & Gerlinde   |
| Kluft, Elaine                    | Lamdin, Jack H.           |
| Klutkowski, Andrew               | Lampert, Molly Ann        |
| Knip, Lisa                       | Landau, Linda & Ronald W. |
| Knudsen, Arden                   | Landau, Sidney            |
| Knuth, Lilly                     | Lane, Lillian             |
| Koch, Richard F.                 | Lane, Michele             |
| Kohli, Madhur                    | Lang, Stephen             |
| Kolakowski, Eileen               | Larko, Anne S.            |
| Kolbak, Norma                    | LaRue, Barbara            |
| Koli, Edmund F.                  | LaRusso, Janice           |
| Kolodziej, Gloria J.             | Lashinsky, Philip         |
| Koltun, Barbara                  | Laskey, Ernestine B.      |
| Konicke, Barbara                 | Lassen, Anna              |

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| Lawless, William J.           | Livingston, Samuel A.        |
| Lawton, Marie                 | Lo Bue, Patricia             |
| Leake, Marjorie               | Lo Bue, Thomas P.            |
| Leanzo, Minerva C.            | LoCascio, Ralph              |
| Leard, Margaret               | Lockwood, Katherine M.       |
| Lee, Marilyn                  | Loewy, Mark                  |
| Lefft, Linda                  | Logie, Phyllis               |
| Lehman, Margot                | Long, Elaine P.              |
| Leichman, Stacey              | Longo, Ernest                |
| Lelong, Sally                 | Lopez, Martin A.             |
| Lemlein, Beatrice             | Lowenkron, Ruth              |
| Lenc, John F.                 | Loyal, Bernard               |
| Leonard, Richard D.           | Lucchin, Josephine           |
| Leopold, Patricia S.          | Luening, Catherine B.        |
| Lerner, Morris R.             | Lugo, Edmond C.              |
| Lesnick, John M.              | Lukasik, Shirley E.          |
| Leszczynski, Zig              | Luker, Mazie                 |
| LeVache, Kathleen             | Lundin, C.E.                 |
| Leventhal, Howard G.          | Lupatkin, W.L.               |
| Levine, Adele K.              | Luty, Jeanette               |
| Levine, Ellen                 | Lynch Jr., John A.           |
| Levine, Jeff                  | Lyons, Roger D.              |
| Levitt, Rosanne               | Lyons, Tom Wallace           |
| Lewis, Dorothy                | Lypowy, Joseph L.            |
| Lewis, Joyce H.               | M., Edward (Stanhope)        |
| Lewis, Lazarus                | M., Thomas B. (Florham Park) |
| Lewis, Russell                | Maccherone, Francis & Anne   |
| Leyva, Shiraz                 | MacDonald, Charles R.        |
| Lieberman, Francine           | MacGillis, Miriam,           |
| Lieberman, J.                 | MacKinnon, Christopher       |
| Lietart, Sylvie               | Madhu, Walter                |
| Ligeri, Louise K.             | Maged, Jule M.               |
| Lilien, Judith M.             | Magee, Dorothy A.            |
| Lindauer, William             | Magee, George                |
| Lindenbaum, Israel            | Magelinski, Jean H.          |
| Lindenbaum, Manfred & Annabel | Magin, Claire D.             |
| Lindman, Lillian E.           | Magner, Marjorie R.          |
| Lipka, Jordan                 | Maguire, Daniel              |
| Lipp, Marion                  | Maher, Gregory               |
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| Lippincott, Gregory W.        | Mahoney, John C.             |
| Lipton, Barbara B.            | Maldonado, Rafael            |
| Lissard, Kurt                 | Malerba, Joyce               |
| Litty, Albin                  | Malloy, Athena               |
| Litz, Louise M.               | Malone, C.H.                 |

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| Mancini, Chris           | McBride, C.                |
| Mancini, Richard V.      | McCarty, Diane             |
| Mangiameli, Maria        | McCoy, Patrice J.          |
| Mangiameli, Paul         | McGann, Jeanne M.          |
| Mango, Thomas            | McGarry, Mary              |
| Manice, Pamela           | McGrath, Dorothy L.        |
| Mann, Charlene           | McIntyre, Kathy            |
| Mann, John J. & H.E.     | McIntyre, Sally            |
| Mann, William A.         | McKay, Nancy               |
| March, Amy               | McLain, James W.           |
| Marciani, Barbara        | McMahon, Elizabeth W.      |
| Margolies, Dorothy       | McMann, Joan               |
| Margolis, Jordan         | McMaste, Martha            |
| Mariani, Alice J.        | McNally, Diane             |
| Mariani, Michael         | McNamara, Eve              |
| Marinaro, Tammy M.       | McNeill, Morris            |
| Marion, N.               | McNeill, T.                |
| Markette, Deborah        | McPortland, Peggy          |
| Marlin, Pearl            | Mehran, Reyhan             |
| Marlow, Julie            | Meier, Shirley             |
| Marren, Judy             | Meirs, Elizabeth G.W.      |
| Mars, Charlotte & Robert | Melnik, Harry              |
| Marti, Israel            | Melnyk, Lois D.            |
| Martin, Mary E.          | Mencher, Joan P.           |
| Martineau, Linden P.     | Mendelsohn Jr., Robert A.  |
| Martire, Sandra          | Mendonca, Ellen T.         |
| Martucci, Janet          | Mendones, Barbara          |
| Marx, Robin              | Merin, Ken                 |
| Maslanka, Geraldine      | Mertz, Sue                 |
| Maslin, Virginia L.      | Meschi, Edward J.          |
| Mason, Karen             | Metsopoulos, Peter         |
| Massa, Robert L.         | Meyer, Cynthia             |
| Massaro, John            | Meyers, Charles            |
| Mastracchio, Giovanni    | Michael, Linda             |
| Mathews, Angela          | Michaelson, Michael        |
| Mathey, Austin V.        | Michallef-Eynaud, Melanie  |
| Matthews, Joan           | Michel, Katie              |
| Mattin, Helen            | Michniewski, Susan V.      |
| Mattusch, Eleanor T.     | Mignone, Theresa           |
| Matyjaskiewicz, M.       | Mikulka, Francis           |
| Mauzerall, Denise        | Milch, Ruth                |
| Mawhinney, Martha M.     | Miller, Anistatia R.       |
| Mayer, Evelyn            | Miller, Bruce J.           |
| Maynard, Hildegard M.    | Miller, Craig              |
| Mazzucca, Albert         | Miller, Ernest E. & Sandra |

Miller, Meryl R.  
Miller, Olympia  
Miller, Samuel  
Milonas, Letitia G.  
Mindes, Nancy  
Miner, Melvin  
Mishkin, Gertrude  
Mitchell, Barbara  
Mitsuka, Joan K.  
Mlott, Ludwig S. & Frieda L.  
Modafferi, Anthony  
Mogck, Tim  
Mola, Ruth A.  
Mollick, Mark M.  
Montag, Richard & Elizabeth  
Monti, Mario  
Moody, Miriam P.  
Moody, Theresa M.  
Mooney, Mary Frances  
Moore, Charles T.  
Moore, Mary  
Moorthy, Ramkumar  
Morelli, Michael A.  
Morning, Agnes  
Morris, Jill  
Morris-Farber, Nina  
Morrison, Garry  
Morrisey, Joseph  
Morse, Leon & Marie  
Morse, Wilma  
Morton, Chester M.  
Mosca, E.A.  
Mostov, Liz  
Mowers, Terrance A.  
Mroczek, Barbara  
Muench, Kathleen R.  
Muller, June Helen  
Mulligan, Michael A.  
Mulnick, R.  
Muniz, Frances  
Munk, Marion  
Munson, Mary  
Murphy, Thomas  
Murray, Nancy  
Muscenti, Gloria  
Mushabac, Jane  
Myer, Jane T.

Myers, Dorothy L.  
Nagler, Leslie S.  
Nagy, Evelyn T.  
Nahem-Arkin, Susan  
Naiman, Alec  
Najarian, Ross  
Nakamura, James  
Napolitano, Ann  
Nardelli, Jon  
Nasta, Allan  
Nasworthy, Nancy L.  
Navarrete, Estella M.  
Navarro, Raymundo  
Nebel, Beatrice  
Nelkin, R.S.  
Nelson, J.  
Nelson, Peter K.  
Nemeth, Louise & Peter  
Nevins, Jr., Theodore C.,  
Newman, Leonard  
Newton, Joseph E. & Margaret M.  
Nichols, James S.  
Nicholson, Carolyn D.  
Nieder, Laura  
Nishiura, Eizo  
Nitti, John  
Nolan, Elaine J.  
Nooman, Joseph P.  
Norell, Judith  
Norris, Jean  
Noth, Michael  
Nutkowitz, Paul  
Nuzzo, Julie  
O'Brian, Robert L.  
O'Brien, Thomas J.  
O'Byrne, Laurie  
O'Hare, Allan M.  
O'Neil, A.K.  
O'Reilly, M.A.  
O'Toole, James J.  
Ochoa, David M.  
Octrow, Michael  
Oehl, Mildred W.  
Ogden, Elizabeth K.  
Oland, Alice Wm. N.  
Olcese, Jennie  
Olive, Sheila B.



Ordway, Muriel  
Orlan, Adrienne  
Orlando, Ruth J.  
Ortiz, Mailee  
Osborn, John W. & Carol A.  
Osborne III, William H.  
Osepchuk, Deborah  
Osonitch, Laura  
Oster, Harriet  
Ostergren, Joanne E.  
Ostermayer, Paul A.  
Ostwind, Marcia Edelman  
Othon, Ulysses  
Otters, Paul  
Oxford, Vivian  
Pagliasotti, Kate  
Paley, Ethel S.  
Palladino, Joseph & Dora  
Palmer, Glenn A.  
Palmer, Pat  
Palo, Winnie M.  
Palumbo, Thomas J. & Josephine  
Pantell, Irwin H.  
Pantell, Ruth G.  
Pantic, Diana  
Parker, Corliss  
Parker, Rex A.  
Parkinson, N.  
Parron, Marcia  
Parsons, Elaine  
Passarella, Gilda  
Patterson, Carol B.  
Patterson, Hal & Claudia  
Patton, Charlotte G.  
Paul, M.  
Pavese, Daniel R.  
Pawling, Daniel F.  
Payne, Susan M.  
Pearlman, Ellen  
Peck, Dave & Mira  
Pedersen, Ingeborg  
Peirce, Constance  
Pelton, Judith  
Pena, Angelo P.  
Pennella, Pamela J.  
Pepper, S.D.  
Perez, Valerie

Perlman, Frances M.  
Perlmutter, Benjamin  
Perr, Herbert  
Perrault, Robert M.  
Perrette, Virginie-Alvine  
Perry, Kathleen J.  
Persichetty, Rita  
Pertruckowich, N.  
Petermann, Walter R.  
Peters, Georgeann  
Peters, Melissa A.  
Petersen, Dorothea  
Peterson, Donald F.  
Peterson, Karen  
Peterson, Veora  
Petrocci, Anne  
Pettengill, Belva  
Pfeiffer, Fia Corona  
Phillian, Alex  
Phillips, Mrs. M.R.  
Piazza, Sal & Edith J.  
Pierce, Linda  
Pietrowitz, Mary Ann  
Pietrowitz, Richard G.  
Piltz, Kathy  
Pindell, Howardena  
Pines, Hannah  
Pinkham, Roger S.  
Pitman, Bruce  
Plattner, G.  
Plevinsky, Gail  
Pocsi, Janet E.  
Podeszeva, Mr. & Mrs. Edward  
Poe, Lorraine  
Poehlmann, Kevin  
Polacz, Alice M.  
Policastro, Adam  
Pollack, Patricia A.  
Pomerantz, Janet  
Porder, Michael  
Porder, Peggy  
Porter, J. Andrea  
Porter, Sam & Esther  
Potter, Edward R.  
Powell, Barbara  
Powell, J. Robin  
Powers, Jacqueline

Poznansky, Jack  
Pratt, Ellen  
Priest, Peter  
Prizo, Joseph Jr.  
Prodell, Rita, C.  
Profeta Jr., Fred R.  
Pryor, Sarah  
Psoras, Cynthia  
Puleo, Angelo P.  
Pundyk, Ellen  
Purdy, Christine  
Purdy, James  
Quackenbush, Barbara  
Quent, Barbara  
Quick, Heather Lee  
Quiles, Ana L.  
Quinn, Ellen A.  
Quinn, Ellen L.  
Quinzel, Charles & Florence  
R., Janet L. (New York City)  
Raba, Carolyn  
Rabin, Joel  
Rabin, Selma E.  
Rada, Mary-Ellen  
Rader, Jirapon  
Raff, Emanuel & Ruth  
Raggio, Kathryn J.  
Rainato, Mary Anne  
Ralston, Sarah L.  
Rames, Maureen  
Ramm, Audrey L.  
Randall, Debra L.  
Randolfi, Anita  
Rapier, Mr. & Mrs. Charles  
Rappaport, Judith  
Raso, Carol  
Raspa, Alejandro  
Rasser, Jacques  
Rathjen, Charles E.  
Ravin, Edward  
Ravior, Tina L.  
Raymond, Jr., Stanley S.  
Raynor, Natalie  
Reardon, Suzanne  
Reback, Mark  
Reeve, Anne  
Reganthall, Luella

Regelson, Esther  
Rehl, Marion  
Reichley, David Alan  
Reid, Geraldine M.  
Reilly, Jane L.  
Reilly, Mrs. J.W.  
Renzulli-Migliore, Anne Marie  
RePole, Alice  
Ressner, Philip  
Rettig, Roberta H.  
Reynolds, Kimberly B.  
Ribeiro-Czaplinski, Janet  
Ribot, Douglas  
Ribot, Harriet & Seymour  
Riccardi, Peter & Carole  
Rich, Robert W.  
Riquez, Elizabeth  
Ristine, L.M.  
Rivera, Miriam  
Rivers, Carmen M.  
Roa, Michelle  
Robertzazzi, Joan M.  
Robinson, Edward W. & Janet B.  
Robinson, Lawrence S.  
Robinson, Linda  
Robusto, Leonard A.  
Rocchio, Eleanor G.  
Rode, Wolf J.  
Rodriguez, Rosa  
Rodriguez, Tomas  
Rodriguez, Mary Lou  
Rogers, Kathleen  
Rogow, Arnold A.  
Rola, Fernando E.  
Rosado, Alvin R.  
Rose, Allan  
Rosenberg, Gertrude  
Rosenberg, Hillel & Irma  
Rosenberg, Joseph  
Rosenzweig, Ruth  
Rosman, Lisa  
Ross, Philip D.  
Rossi, Jasmine  
Rossiter, Pat I.  
Rothbell, Jerry & Carol  
Rothberg, Carol  
Roxas, Madeleine R.

Rubin, Allen B.  
Rudder, J.M.  
Ruf, Joseph A.  
Ruitenber, Robin  
Runyon, Florence  
Ruskan, Rita  
Russell, John W.  
Russell, Kim R.  
Russell, Marilyn  
Russo, Richard  
Ryan, Alice V.  
Ryan, Frances M.  
Ryan, Linda C.  
Sabarese, Anita  
Sabinson, Harvey  
Sachkowsky, Michael  
Sachs, Lori M.  
Sager, Bruce  
Sagiani, Frederica  
Salcines, Barbara Russou  
Salisbury, Gertrude  
Sallows, Tracy  
Sallustro, Vincent  
Saltiel Sarah  
Samalot, Harry  
Samra, Francisca M.  
Samtak, John  
Sannelli, Jennifer  
Sarafind, Eleanor  
Sarver, Michael  
Satter, Marlene Y.  
Saunders, Mrs. R.  
Scalice, Aileen  
Schade, Barbara J.  
Schaefer, Stephanie  
Schanzer, Beverly  
Scharf, Joel  
Scheader, Christopher  
Schenker, Diana  
Scher, Stephen  
Schermer, Marie A.  
Scheve, Cornelius A.  
Schiff, Corinne  
Schiller, Yvonne & John  
Schilling, Jonathan  
Schleifer, Shirley  
Schlosser, Bari

Schmalting, Ellen H.  
Schmidt, Yvonne  
Schmitt, Christine  
Schreiber, Frank  
Schulz, Melissa  
Schulze, Elsie  
Schuman, Wilfred  
Schunk, H.  
Schwartz, Bernard  
Schwartz, Leonard  
Schwartz, Ruth  
Schwartzberg, Laura  
Schwarzman, Carol  
Scimeca, Aurelia & Yolanda  
Scoma, Audrey J.  
Scott, Kathryn  
Scott, Vivian  
Scripps, Joan  
Seale, Irvine  
Sedlacik, Teresa  
Seegers, Edith A.  
Sefl, Gladys W.  
Segal, Charles  
Segall, Irving  
Segarra, Frances J.  
Segers, Johannah  
Sekulich O.  
Selesnick, Ivan  
Seligman, Edith  
Seltzer, Harriet  
Senior, Steven T.  
Senter, Jerome  
Sevilen, Virginia M.  
Seybuchler, Martha  
Shackman, Paul  
Shaffer-Koros, Carole  
Shane, Jane  
Shannon, Steven & Katherine  
Shapiro, Hope  
Shapiro, Nathan  
Sharbaugh, Jay  
Sheil, Mary Ann  
Sheldon, Robert F.  
Shelton, Joel  
Shepard, Jackson  
Sheridan, Betty Ann & Ed  
Shifrin, Allen E.

Shimoni, Motti  
Shinn, Roxanne, Max & Robert A.  
Shookhoff, Muriel  
Siddons, Bonnie  
Sideman, Dorothy  
Siegel, Arthur  
Siegel, Owen  
Sillery, Robert  
Silva, D.  
Silver, Beatrice & Meyer  
Silver, Constance S.  
Silverman, Deborah  
Silverman, Jenny  
Simon, Allan  
Simon, Claire  
Simon, Ellen  
Simon, Shirley  
Simone, Alice  
Simonson, Robert  
Simpson, Dorothy  
Sipe, Robert F.  
Sirken, Norma S.  
Sisler, Barbara  
Sissick, Judith L.  
Skelley, Joe  
Skica, David  
Sklar, Herbert  
Sklar, Hilde  
Small, Muriel & Jacob  
Smith, Barbara M.  
Smith, Dorothy  
Smith, Frances H.  
Smith, John F.  
Smith, Joy  
Smith, June R.  
Smith, Pat  
Smith, Priscilla A.  
Smith, Sheridan R.  
Smith, Shirley  
Smoller, Muriel  
Smykla, Richard  
Snyder, Nancy  
Snyder, Shep  
Soens, Sara & R.J.  
Sokolow, Adam  
Sole, Sonia  
Solomon, Renee

Sommer, Elfriede Hueber  
Sonneborn, Babette H.  
Sorbello, Dino  
Sorrentino, Marie  
Souther, Gretchen S.  
Spatz, Margaret N.  
Spaulding, Barbara L.  
Speirs, Martha  
Spencer, Anne M.  
Sphatt, Miriam  
Spiegel, Rita  
Spielvogel, Barry A.  
Spitzer, Michael E.  
Sporel, Mr. & Mrs. Karl H.  
Sprague, Charles  
Spriggs, Virginia  
Springhetti, Martin  
St. John, Bridget  
Stamford, Linda  
Stanford, Blanche V.  
Stanko, Rosemary  
Stark, Hilda H.  
Starlin, Dorothy  
Stateman, Ruth G.  
Stathis, Helen  
Staub, Karen  
Staubi, Walter  
Stebbins, Richard R.  
Stein, Deborah S.  
Steinhart, Ralph  
Steinman, Susan  
Steneck, Dorothy  
Stennes, Joseph  
Stepanski, D.M.  
Stephens, Nancy  
Stern, Walter  
Stewart, Dudley  
Stiteler, Kathleen Beckley  
Stix, Beverley M.  
Stoddard, Robert & Mary  
Stolarz, Douglas F.  
Stone, Andy  
Stone, Bettie W.  
Tracey, Beatrice M. & Stanely T.  
Strang, Vivian  
Strauss, Beverly V.  
Strong, Judith

|                               |                          |
|-------------------------------|--------------------------|
| Strother, Jennifer            | Trencher, Jodi A.        |
| Stultz , Sr., Meldon V.R.     | Trochymczuk, Laurie      |
| Stumpf, Martin                | Troese, John             |
| Subramanyam, Radha            | Trotta, Carolyn          |
| Surace, Michael               | Turner, Louisa           |
| Surgent, Gayla G.             | Turner, Marie Claude     |
| Sutto, Maria Paola            | Uehling, Judith          |
| Swan, Andrea                  | Uhl, Palmer              |
| Swope, Dorothea H.            | Umrath, Thomas           |
| Szeliga, Irene                | Unangst, Diane L.        |
| Szmagalski, Antoinette        | Urquhart, Kenneth        |
| Sznajderman, Marc             | Usechak, Louise          |
| Szostak, Lorraine             | Utzinger, Katharine B.   |
| T., John (New York City)      | Valenti, John            |
| Tamarin, Charles S.           | Valerio, Andrea          |
| Tamberg, Mercedes             | Van Den Hengel, Diana    |
| Tapirdea, Eugene S.           | Van Lindt, Lisa          |
| Tapogna, Gwen Miller          | Van Pelt, Cynthia        |
| Taraszka, Eugene              | Van Rheenen, Cathy       |
| Tasch, Ezra                   | Vansworth, Ruth M.       |
| Taylor, Barbara E.            | Vaughan, Charles & Jane  |
| Taylor, Sharon                | Vega, Joan Griffiths     |
| Tenenbaum, Marcel & Mildred   | Vella, Anne              |
| Tenenbaum, Selma              | Venables, Joel R.        |
| Termina, Joyce                | Vendittelli, Serafino A. |
| Terranova, Ida                | Venutolo, Albert         |
| Thau, Seymour L.              | Vespole, Vincent A.      |
| Thelen, Julie                 | Vetrero, Steve           |
| Themm, Caroline F.            | Vijneran, Frederic P.    |
| Thoman, Anthony               | Vincler, Joseph          |
| Thomas, John K.               | Violette, Timothy P.     |
| Thomas, Judith L.             | Viruet, Anna Evanoff     |
| Thomas, Mrs. John A.          | Vitale, Robert           |
| Thompson III, James H.        | Vogel, Bob               |
| Thompson, Todd M.             | Vogel, Iris              |
| Thomson, Maria A. & Robert M. | Vogt, Michele            |
| Tinucci, Edmond               | Volz, Regina A.          |
| Titsworth, Doris B.           | Von Frieling, K.         |
| Toedt, Mr. & Mrs. Harry       | Vonah, Mary Jo           |
| Toland, William J.            | Vullemoz, Yvonne         |
| Toledo, Victor                | Vyse, Keith R.           |
| Tom, Martha S.                | W., Kristen J. (Audubon) |
| Torrey, Jeanette              | W., Regina (Camden)      |
| Tow, Arthur                   | W., Wally (Garden City)  |
| Townsend, Eleanor             | Wagner, David L.         |
| Toy, Mary M.                  | Wagner, George W.        |
| Tramontin, Arthur             | Wagner, John L.          |

Wagner, Kathrin M.  
Waitts, Joan  
Walker, Donald R.  
Walker, Sally  
Walliczek, Norbert  
Walters, Doris Peniston  
Walters, Ellen  
Wamato, Robert M.  
Wand, Karen & Christopher A.  
Ward, Barbara  
Ward, Herman M.  
Ward, Karen & Christopher  
Ward, Wilfrid W.  
Wargo, Lisa M.  
Washburn, Alan  
Washburn, Joan T.  
Wass, Linda L.  
Watson, Marjorie O.  
Watson, Robin Ellen  
Weaver, Lisa  
Webb, Judith & Gregory  
Webber, Gail  
Weber, Sophie R.  
Weborg, Dolores T.  
Wedl, Frank, C.  
Weidenbacher, Judith  
Weidenbacher, Therese  
Weidman, Lee  
Weigcl, Barbara B.  
Weiler, Teresa  
Weinberg, Dorothy  
Weinstein, Liza  
Weinstock, Jerry  
Weinstock, Ruth  
Weisman, Tomi  
Weiss, Judith  
Weiss, Carol I.  
Weiss, Kathleen & Barry  
Weiss, Leo G.  
Weiss, Noah  
Wells, Lea  
Wells, Mrs. William H.  
Wenhold, Jeanetta  
Wenick, Dale  
Wentzell, David  
Werse, Naoma  
Weseley, Phiebe

Wesson, Cynthia S.  
West, Jan  
Westbrooks Jr., Richard G.  
Westenberg, William  
Wetjen, Diane  
Whilty, Fintan  
Whitaker, Chris  
White, Emily  
White, Michael J.  
White, Rosemary  
Whiteside, Duncan  
Wieboldt, Sally  
Wiener, Abraham  
Wilk, Marge  
Wilkens, Edward H.  
Wilkins, Kathleen N.  
Will, Madeline, A.  
Willey, Betty B.  
Williams, Levonne  
Williams, June V.  
Williams, Laura  
Williams, P.F.  
Williams, Richard  
Williams, Taffy Lee  
Wilmore, Eve  
Wilson, Ken  
Wilson, Marie  
Wimpfheimer, V.  
Winner, Carol C.  
Wion, Victoria  
Wishengrad, Judy  
Wittman, Nancy  
Wiznia, Jane S.  
Wohlrab, Charles  
Wolfe, M.  
Wolff, Abigail  
Wolman, Vera N.  
Wong, Hanson  
Wong, Michael V.  
Wood, David & Patricia  
Woolf, David V.  
Worton, Kenneth M.  
Wright, L.  
Y., Ruth (Medford, NJ)  
Y., Stephen R. (Winfield Park)  
Yacowitz, Harold  
Yasbin, Ira L.

Yasbin, Roberta  
Yasuhara, Ann  
Yeager, Donald  
Yeager, Sarah G.  
Young, Shani K.  
Young, Zerelda  
Young, Roslyn L.  
Youngs, Margaret  
Yu, Shujen  
Zaage, Herman  
Zablow, Ellen & Leonard  
Zack, Steven  
Zanelli, Arthur  
Zavaglia, James  
Zebro, Patti G.  
Zelinka, S.  
Zelman, Elaine  
Zeoli, Mario A.  
Zerbe Jr., J. Domer  
Zimmer, Georgine M.  
Zimmerman, Gail  
Zimmerman, Patricia J.  
Zocki, Ron & Claudia  
Zuberer, Ruth M.  
Zubkoff, Seymour  
Zucker, Marjorie B.  
Zuckerman, Andrea L.  
Zugar, Robert  
Zulkeski, Charles T.  
Zumar, Lisa  
Zwanziger, Daniel  
Zwerling, Sandra

**14.2.17 Form 17 Names**

Barker, John

Gifford, Garfield

**ILLEGIBLE SIGNATURES:**

Illegible-1

Illegible-2

Illegible-3

Illegible-4

Illegible-5

Illegible-6

Illegible-7

Illegible-8

Illegible-9

Illegible-10

Illegible-11

Illegible-12

Illegible-13

Illegible-14

Illegible-15

Illegible-16

Illegible-17

Illegible-18

Illegible-19

Illegible-20

Illegible-21

Illegible-22

Illegible-23

Illegible-24

Illegible-25

Illegible-26

Illegible-27

Illegible-28

Illegible-29

Illegible-30

Illegible-31

Illegible-32

Illegible-33

Illegible-34



#### **14.2.18 Form 18 Names**

Barker, John

Gifford, Garfield

#### **14.2.18 Form 19 Names**

D'Auria, Maureen  
Mastrogiovanni, JoAnn  
McDonald, Melinda  
Novellino, Louis

#### **14.2.20 Form 20 Names**

Allured, William F. & Alice D.

Blake, A. Gordon

Faugno, Lucia

Hilton, M.

King, Dolores

O'Brien, Kathleen & Michael

Robinson, E.G.

Wheaton, Barbara

#### **14.2.21 Form 21 Names**

Campo, Elsie

Campo, Leslie

Campo, Ruth A.

D'Addelta, Mr. & Mrs. J.

Fairbanks, Kevin

Linehan, Brian

Lyons-Fairbanks, Janet

McGovern, Mary

#### **14.2.22 Form 22 Names**

Cenicola, Rosemary

Cenicola, JeanForm 22

Buzzoni, Mary

**14.2.23 Form 23 Names**

Block, Jim  
Brower, James  
Brower, Robert Sr.  
Caniano, Joe  
Cataldo, Domenico  
DalPizzol, John  
DaSilva, L.  
DeLane, Gerald  
Detore, Carol  
Dulack, Michael  
Ehrbar, Robert  
Grotsky, R.K  
Hofheinz, Juergen  
Iulo, Paul  
Iversen, Charles  
Locascio, S.  
Mann, Anthony M.  
Marlow, Donald  
Martire, Paul  
Mazzarella, Steve  
McCabe, Michael  
Meurer, James  
Meurer, Tracyann  
Mikail, David  
Monaco, Frank  
Mulcahy, Brian  
Murray, Timothy  
Natino, Bart  
Oliveira, J.  
Pantaleo, Joseph E.  
Pinto, Lawrence  
Polander, James  
Proctor, Paul  
Sanzari, Anthony  
Sanzari, John Sr.  
Sirfert, Thomas  
Spicacci, Albina  
Strothman, Elizabeth  
Van Winkle, Dave  
Vidal, Daniela  
Warmenhouden, Jason

### 14.3 Federal, State, Counties/Municipalities, Non governmental agencies, and Individual Names and Codes

| Source  | Comment Type | Letter Code | Comment and Response Code  |
|---|--------------|-------------|--|
| <b>Federal Agencies</b>   |              |             |  |
| US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service | Written      | NMFS-1A     | 2.0-B  |
|   |              | NMFS-1B     | 7.4-A  |
|   |              | NMFS-1C     | 4.3-E, 4.3-F   |
|   |              | NMFS-1D     | 4.3-F  |
|   |              | NMFS-1E     | 4.3-F  |
|   |              | NMFS-1F     | 4.2-D, 4.2-E   |
|   |              |             | 4.3.2-C, 4.3.2-D, 4.2.3-F  |
|   |              | NMFS-1G     | 4.3.2.4-A, 4.3.2.4-C   |
|   |              | NMFS-1H     | 5.5.2.1.4-C, 5.5.2.1.4-D, 5.5.2.1.4-E  |
|   |              | NMFS-1I     | 4.2-C  |
|   |              | NMFS-1J     | 5.2-E, 5.2-F   |
|   |              | NMFS-1K     | 5.3-A, 5.2-E, 5.2-F, 5.2-G, 5.3.2-D, 5.3.2.1-A, 5.3.2.1-B, 5.3.2.1-C, 5.3.2.2-A, 5.3.2.3.3-A, 5.4.2-A, |
|   |              | NMFS-1L     | 5.5.1.4-B  |
|   |              | NMFS-1M     | 5.0-B  |
|   |              | NMFS-1N     | 6.4-A, 6.4-B   |
|   |              | NMFS-1O     | 6.1.3.2-C, 6.2-E   |
|   |              | NMFS-1P     | 7.15.2-A   |
|   |              | NMFS-1Q     | 7.0-C, 7.0-D, 7.0-E  |
|   |              | NMFS-1R     | 5.2-D  |
|   |              | NMFS-1S     | 7.2.2.2.4-C, 7.2.2.2.4-E   |
|   |              | NMFS-1T     | 7.19.2-B   |
|   |              | NMFS-1U     | 8.2-M, 8.3-D   |
|   |              | NMFS-1V     | 8.1-H  |
|   |              | NMFS-1W     | 8.3.2-C, 8.3.3.1-B   |
|   |              |             | 2.0-I, 2.0-M, 5.3-F, 5.3-G   |
| US Department of the Interior, Fish and Wildlife Service  | Written      | FWS-2A      | 5.2-B  |
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|   |              | FWS-2E      | 7.2-B  |
|   |              | FWS-2F      | 7.8-B  |

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| US Department of the Interior, Fish and Wildlife Service | Written      | FWS-3A      | 7.0-B                     |
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| US Department of the Interior, Fish and Wildlife Service | Spoken       | FWS-4       | 6.2.2-C                   |
| US Department of the Interior, Office of the Secretary   | Written      | DOI-2A      | 8.2-N                     |
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| US Environmental Protection Agency                 | Written          | USEPA-1A<br>USEPA-1B<br>USEPA-1C<br>USEPA-1D<br>USEPA-1E<br><br>USEPA-1F<br>USEPA-1G<br><br>USEPA-1H<br>USEPA-1I<br>USEPA-1J<br>USEPA-1K<br>USEPA-1L<br>USEPA-1M<br>USEPA-1N<br>USEPA-1O<br>USEPA-1P<br>USEPA-1Q | 2.0-A<br>5.5.1.4-C<br>4.3-D, 4.3-G, 4.3.2-A<br>4.3.2-A<br>5.3-A, 5.3-F, 5.3-G,<br>5.3.2.3-A, 5.5-A<br>4.3.2-B<br>5.3.2-A, 5.3.2.1-C,<br>5.3.2.2-C, 5.4.2-A<br>5.5.2.1.4-E, 5.5.2.1.4-G<br>5.0-A<br>2.1-C, 5.0-D<br>7.2-D, 7.2-F<br>7.2-E<br>8.3.2-C<br>7.16.2-A, 7.16-B<br>5.5.2.1.4-E<br>7.2-F<br>2.0-A |
| <b>State Legislators</b>                           |                  |  |  |
| DeGrange, James (Maryland Senate, District 32)     | Written & Spoken | DEG-1A<br>DEG-1B   | 2.1-E<br>7.19.2-E  |
| DiGaetano, Paul (New Jersey Assembly, District 36) | Written          | DIG-2A<br>DIG-2B   | 5.5*<br>7.19.2-E   |

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| Heck, Rose (New Jersey Assembly, District 38)        | Written          | HEC-1A<br>HEC-1B<br>HEC-1C<br>HEC-1D   | 7.0-G<br>7.14.2-A<br>7.13.2-C<br>5.2-F   |
| Heck, Rose (New Jersey Assembly, District 38)        | Spoken           | HEC-2A<br>HEC-2B<br>HEC-2C<br>HEC-2D<br>HEC-2E<br>HEC-2F<br>HEC-2G   | 7.19-C<br>7.13-A<br>7.19-C<br>7.14.2-E<br>7.13-A<br>6.15-A<br>5.2-F  |
| Talarico, Guy (New Jersey Assembly, District 38)     | Spoken           | TAL-1A<br>TAL-1B<br>TAL-1C   | 7.13-A<br>7.15-B<br>7.13-A   |
| Weinberg, Loretta (New Jersey Assembly, District 37) | Written          | WEI-6  | 5.2-F  |
| <b>State/Regional Agencies</b>                       |                  |  |  |
| Hackensack Meadowlands Development Commission        | Written & Spoken | HMDC-1A<br>HMDC-1B<br>HMDC-1C<br>HMDC-1D<br>HMDC-1E<br>HMDC-1F   | 5.5.1.4-C<br>8.3-D<br>2.1.4-A<br>7.15-C, 7.15.4-A<br>7.13.2-C<br>7.13.4-A  |
| Hackensack Meadowlands Development Commission        | Written          | HMDC-2A<br>HMDC-2B<br>HMDC-2C<br>HMDC-2D<br>HMDC-2E<br>HMDC-2F<br>HMDC-2G<br>HMDC-2H<br>HMDC-2I<br>HMDC-2J<br>HMDC-2K<br>HMDC-2L<br>HMDC-2M<br>HMDC-2N<br>HMDC-2O<br>HMDC-2P | 4.3-C<br>5.5.1.2-B, 5.5.1.4-C<br>5.3.2.3.2-A<br>7.15.2-F<br>2.3-C<br>4.2-D, 4.2-E<br>5.5.2.1.4-F<br>5.5.2.1.4-B, 5.5.2.1.4-E<br>7.14-A<br>7.15-G<br>7.14-F<br>7.15-G<br>6.15-C<br>6.15-C<br>7.15-G<br>7.15.2-H |

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| New Jersey Department of Environmental Protection | Written      | NJDEP-1A    | 2.0-A                                      |
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|        |              | NJDEP-1KK   | 6.2.3.3-A                 |
|        |              | NJDEP-1LL   | 6.2.3.5.1-A               |
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|  |              | NJDEP-1SSS<br>NJDEP-1TTT<br>NJDEP-1UUU<br>NJDEP-1VVV<br>NJDEP-1WWW<br>NJDEP-1XXX<br>NJDEP-1YYY<br>NJDEP-1ZZZ<br>NJDEP-1AAAA<br>NJDEP-1BBBB<br>NJDEP-1CCCC<br>NJDEP-1DDDD<br>NJDEP-1EEEE<br>NJDEP-1FFFF<br>NJDEP-1GGGG<br>NJDEP-1HHHH<br>NJDEP-1IIII | 7.14.2-A<br>7.15-E<br>7.15.2.1-A<br>7.15-F<br>7.15-G, 7.15.2.5-A<br>7.15-G<br>7.16.4.1-A<br>7.16.4.2-A<br>7.19-B<br>7.21.1.1-A<br>7.22-A<br>7.23-A<br>7.24.2.1-A<br>7.24.2.1-A, 7.24.2.1-B<br>8.3.2-C, 8.3.2-E<br>8.3.3-A |
| New Jersey Department of Transportation          | Written      | NJDOT-1A<br>NJDOT-1B  | 7.14-F<br>7.15-G  |
| NJ Transit                                       | Written      | NJT-1A<br>NJT-1B<br>NJT-1C<br>NJT-1D<br>NJT-1E  | 7.14.2.3-A<br>4.2-C<br>4.2-C<br>6.20-A<br>7.14-H  |
| State of New York Office of the Attorney General | Written      | NYAG-1A<br>NYAG-1B  | 5.2-E<br>7.0-A  |
| <b>Counties/Municipalities</b>                   |              |   |   |
| Borough of Allendale                             | Written      | BA-1  | 6.5.3-B   |
| Borough of Carlstadt                             | Written      | CARL-1A<br>CARL-1B  | 7.19.2-G<br>5.5*  |
| Borough of Carlstadt                             | Spoken       | CARL-2  | 7.19.2-D  |

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| Borough of Carlstadt         | Spoken       | CARL-3B  | 5.5*  |
| Borough of Carlstadt         | Spoken       | CARL-4A<br>CARL-4B<br>CARL-4C<br>CARL-4D           | 7.21.1.1-A<br>7.19.2-E<br>7.19.2-E<br>2.1-D               |
| Borough of Carlstadt         | Spoken       | CARL-5   | 7.19.2-G  |
| Borough of Hasbrouck Heights | Written      | HH-1A<br>HH-1B<br>HH-1C<br>HH-1D                   | 5.5*<br>7.2.2-A<br>7.19.2-E<br>7.19.2-E                   |
| Borough of Little Ferry      | Spoken       | LF-1A<br>LF-1B                                     | 7.15.2-F<br>5.2-A   |
| Borough of Little Ferry      | Spoken       | LF-2A<br>LF-2B<br>LF-2C<br>LF-2D<br>LF-2E          | 6.13.2-A<br>7.14-J<br>7.15-E<br>7.13.2-C<br>4.3.2.2-B     |
| Borough of Little Ferry      | Spoken       | LF-3A<br>LF-3B<br>LF-3C                            | 7.13.2-C<br>6.13-B<br>7.13.2-C                            |
| Borough of Little Ferry      | Spoken       | LF-4A<br>LF-4B<br>LF-4C                            | 7.13-A<br>7.15-B<br>4.3.2.2-B                             |
| Borough of Little Ferry      | Spoken       | LF-5A<br>LF-5B<br>LF-5C                            | 6.13.2-A<br>7.13-A<br>5.3.2.3-A                           |
| Borough of Little Ferry      | Spoken       | LF-6A<br>LF-6B<br>LF-6C<br>LF-6D                   | 7.15-B<br>7.15-B<br>4.3.2-E<br>4.3.2-E                    |
| Borough of Little Ferry      | Spoken       | LF-7A<br>LF-7B                                     | 7.15-B<br>7.13-A  |
| Borough of Little Ferry      | Spoken       | LF-8A<br>LF-8B<br>LF-8C<br>LF-8D<br>LF-8E<br>LF-8F | 5.2-F<br>6.15-A<br>4.3.2-B<br>9.0-C<br>4.3.2.2-B<br>7.0-A |
| Borough of Little Ferry      | Spoken       | LF-9A  | 4.3.2-E   |



| Source                                       | Comment Type | Letter Code | Comment and Response Code |
|--|--------------|-------------|---------------------------|
|  |              | LF-9B       | 7.13-A*                   |
|  |              | LF-9C       | 7.22.1.1-A                |
|  |              | LF-9D       | 6.0-B                     |
|  |              | LF-9E       | 7.13-B                    |
| Borough of Little Ferry                      | Spoken       | LF-10A      | 6.7.2.2-A                 |
|  |              | LF-10B      | 6.0-B                     |
| Borough of Moonachie                         | Spoken       | MOON-1      | 7.15.2-B                  |
| Borough of North Arlington                   | Written      | NA-1A       | 5.5*                      |
|  |              | NA-1B       | 7.0-A                     |
|  |              | NA-1C       | 7.0-A                     |
| Borough of North Arlington                   | Spoken       | NA-2A       | 7.19.2-E                  |
|  |              | NA-2B       | 6.1.1-B                   |
|  |              | NA-2C       | 2.1-E                     |
| Borough of Oakland                           | Spoken       | BO-1A       | 5.5*                      |
| Borough of Rutherford                        | Spoken       | BR-1        | 7.19-C                    |
| Borough of Wood-Ridge                        | Spoken       | WR-1        | 4.3.2.2-B                 |
| City of Jersey City                          | Written      | JC-1        | 5.2-C                     |
| County of Bergen                             | Written      | BC-1A       | 7.19.2-E                  |
|  |              | BC-1B       | 7.19.2-E                  |
|  |              | BC-1C       | 7.19.2-E                  |
|  |              | BC-1D       | 7.14-D                    |
|  |              | BC-1E       | 7.15.2-G                  |
|  |              | BC-1F       | 6.2.3-M                   |
|  |              | BC-1G       | 8.3-C                     |
|  |              | BC-1H       | 5.5*                      |
|  |              | BC-1I       | 7.21-A                    |
|  |              | BC-1J       | 5.5*                      |
| County of Bergen Board of Chosen Freeholders | Written      | CBBCF-1A    | 5.2-F                     |
|  |              | CBBCF-1B    | 7.2.2.1-A                 |
|  |              | CBBCF-1C    | 7.16.2-B                  |
|  |              | CBBCF-1D    | 7.4-A                     |
|  |              | CBBCF-1E    | 5.2-E                     |
| County of Bergen Board of Chosen Freeholders | Written      | CBBCF-2     | See CBBCF-3               |
| County of Bergen Board of Chosen Freeholders | Written      | CBBCF-3A    | 7.0-C                     |
|  |              | CBBCF-3B    | 7.21-F                    |
|  |              | CBBCF-3C    | 5.3.2.1-C                 |
| County of Hudson Board of Chosen Freeholders | Written      | CHBCF-1A    | 5.2-F                     |
|  |              | CHBCF-1B    | 7.19.2-B                  |

| Source                       | Comment Type | Letter Code  | Comment and Response Code  |
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|                              |              | CHBCF-1C   | 7.10-A   |
| Township of South Hackensack | Spoken       | SH-2A<br>SH-2B<br>SH-2C  | 2.1-E<br>8.2-G<br>7.0-I  |
| Township of South Hackensack | Spoken       | SH-1A<br>SH-1B<br>SH-1C  | 2.1-E<br>7.19.2-E<br>6.0-B   |
| Township of Weehawken        | Written      | WEE-1  | 5.2-F  |
| Village of Ridgefield Park   | Spoken       | VRP-3A<br>VRP-3B<br>VRP-3C<br>VRP-3D<br>VRP-3E<br>VRP-3F   | 6.13-A<br>7.24-B<br>6.13-C<br>7.19-C<br>6.15-A<br>2.0-A  |
| Village of Ridgefield Park   | Spoken       | VRP-5A<br>VRP-5B<br>VRP-5C<br>VRP-5D<br>VRP-5E   | 5.3.2.3-A<br>2.0-A<br>6.2.3.3-B<br>6.0-B<br>5.2-F  |
| Village of Ridgefield Park   | Written      | VRP-1A<br>VRP-1B<br>VRP-1C   | 7.13-B<br>7.15.2-B, 7.16.2-B<br>4.3.2.2-B  |
| Village of Ridgefield Park   | Written      | VRP-4A<br>VRP-4B<br>VRP-4C<br>VRP-4D<br>VRP-4E<br>VRP-4F<br>VRP-4G<br>VRP-4H<br>VRP-4I<br>VRP-4J<br>VRP-4K<br>VRP-4L<br>VRP-4M<br>VRP-4N | 7.0-A<br>7.0-C, 7.0-F<br>5.2-A<br>5.3-B<br>4.3-A<br>5.3-B<br>8.1-C<br>8.2-C<br>7.21-B, 7.21-D<br>7.15-E<br>7.16-C<br>7.13-G<br>7.13-H<br>5.2-F |
| Village of Ridgefield Park   | Spoken       | VRP-2A<br>VRP-2B<br>VRP-2C   | 7.15.2-B<br>7.13.2-C<br>5.3.2-B  |

| Source  | Comment Type | Letter Code  | Comment and Response Code   |
|---|--------------|--|---|
|   |              | VRP-2D   | 5.2-A   |
| Village of Ridgewood                                | Spoken       | VR-1A<br>VR-1B   | 6.2.1.2-B<br>7.13-A   |
| <b>Non-governmental Organizations</b>               |              |  |   |
| American Littoral Society                           | Spoken       | ALS-1A<br>ALS-1B<br>ALS-1C<br>ALS-1D                           | 5.2-A<br>5.3-A<br>8.3.3-A<br>5.2-A                                |
| Arline Simpson Associates, Inc.                     | Written      | ASA-1  | 7.19.2-E  |
| Asbestos Insulators Local 32                        | Spoken       | AI32-1A<br>AI32-1B   | 5.2-E<br>7.19.2-D   |
| Association of New Jersey Environmental Commissions | Written      | ANJEC-1A<br>ANJEC-1B<br>ANJEC-1C                               | 5.2-F<br>5.3.2.3-A<br>8.3.1-B                                     |
| Avjet Corporation                                   | Written      | AVCORP-1   | See Form 1  |
| Bergen County Audubon Society                       | Written      | BCAS-1A<br>BCAS-1B<br>BCAS-1C<br>BCAS-1D<br>BCAS-1E<br>BCAS-1F | 8.3.1-B<br>7.19.2-B<br>4.3.2.2-B<br>4.3.2-C<br>7.15.2-B<br>7.10-B |
| Bergen County Audubon Society                       | Written      | BCAS-2A<br>BCAS-2B<br>BCAS-2C<br>BCAS-2D<br>BCAS-2E<br>BCAS-2F | 5.2-A<br>4.3-A<br>5.3.2.1-C<br>4.3.2.2-B<br>7.15.2-F<br>8.3.1-B   |
| Bergen County Audubon Society                       | Spoken       | BCAS-3A<br>BCAS-3B<br>BCAS-3C                                  | 5.2-C<br>4.3.2.2-A<br>4.3.2.2-B                                   |
| Bergen County Building Trades                       | Spoken       | BCBT-1A<br>BCBT-1B   | 7.19.2-E<br>5.3-E, 5.3.2.3.1-A                                    |
| Bergen County Central Trades and Labor Council      | Written      | BCCTL-1A<br>BCCTL-1B   | 7.19.2-E<br>5.5*  |
| Bergen County Central Trades and Labor Council      | Spoken       | BCCTL-2A<br>BCCTL-2B<br>BCCTL-2C<br>BCCTL-2D<br>BCCTL-2E       | 7.19.2-E<br>2.1-E<br>7.19.2-E<br>5.5*<br>2.1-E                    |

| Source  | Comment Type     | Letter Code   | Comment and Response Code   |
|---|------------------|---|---|
|   |                  | BCCTL-2F<br>BCCTL-2G  | 7.19.2-E<br>2.1-E   |
| Better North Hudson Communities                   | Written          | BNHC-1A<br>BNHC-1B  | 5.2-F<br>7.0-G  |
| Building and Construction Trades Council          | Spoken           | BCTC-1A<br>BCTC-1B  | 2.1-E<br>7.19.2-E   |
| Carlstadt Public Schools                          | Spoken           | CPS-1   | 7.19.2-G  |
| Carlstadt Public Schools                          | Spoken           | CPS-2A<br>CPS-2B  | 5.5*<br>7.19.2-G  |
| Chesapeake Management Group, L.L.C.               | Written          | CMG-1   | See Form 1  |
| Coalition for the Bight                           | Written & Spoken | CFB-1A<br>CFB-1B<br>CFB-1C<br>CFB-1D                                      | 5.2-F<br>4.3.2-E<br>8.3.3.1-C<br>4.3.2.2-B                                |
| Community Consulting Services, Inc.               | Written          | CCSI-1A<br>CCSI-1B  | 7.15.2-B<br>7.16.2-C, 7.22.2-A 7.24-I                                     |
| Community Consulting Services, Inc.               | Written          | CCSI-2A<br>CCSI-2B<br>CCSI-2C<br>CCSI-2D<br>CCSI-2E<br>CCSI-2F<br>CCSI-2G | 7.19-E<br>7.15-E<br>7.14-C<br>7.19-C<br>7.15.2-B<br>7.19-E<br>7.15-E      |
| Community Improvement Association of Little Ferry | Spoken           | CIALF-1A<br>CIALF-1B<br>CIALF-1C<br>CIALF-1D<br>CIALF-1E                  | 7.0-I<br>7.10-A<br>7.10-A<br>7.13-B<br>5.2-F                              |
| Cornucopia Network of New Jersey                  | Written          | CNNJ-1A<br>CNNJ-1B<br>CNNJ-1C<br>CNNJ-1D<br>CNNJ-1E<br>CNNJ-1F<br>CNNJ-1G | 4.3.2.2-B<br>7.2.2.2.3-K<br>7.21-A<br>5.2-F<br>5.2-E<br>7.13.2-A<br>5.2-C |
| Environment Committee of Hoboken                  | Spoken           | ECH-1   |   |
| Environment Committee of Hoboken                  | Written          | ECH-2A<br>ECH-2B<br>ECH-2C  | 6.13-A<br>5.2-D<br>5.2-C  |

| Source                   | Comment Type | Letter Code  | Comment and Response Code   |
|--------------------------|--------------|--|---|
|                          |              | ECH-2D<br>ECH-2E   | 5.3-E, 5.3.2.1-C<br>5.2-C   |
| Environmental Commenters | Written      | ENVCOM-3A<br>ENVCOM-3B<br>ENVCOM-3C<br>ENVCOM-3D<br>ENVCOM-3E<br>ENVCOM-3F<br>ENVCOM-3G<br>ENVCOM-3H<br>ENVCOM-3J<br>ENVCOM-3K<br>ENVCOM-3L<br>ENVCOM-3M<br>ENVCOM-3N<br>ENVCOM-3O<br>ENVCOM-3P<br>ENVCOM-3Q<br>ENVCOM-3R<br>ENVCOM-3S<br>ENVCOM-3T<br>ENVCOM-3U<br>ENVCOM-3V<br>ENVCOM-3W<br>ENVCOM-3X<br>ENVCOM-3Y<br>ENVCOM-3Z<br>ENVCOM-3AA<br>ENVCOM-3BB<br>ENVCOM-3CC<br>ENVCOM-3DD<br>ENVCOM-3EE<br>ENVCOM-3FF<br>ENVCOM- | 5.2-A<br>2.0-A, 2.0-E<br>2.0-A, 2.0-E<br>2.0-N<br>7.2-A<br>7.3.2.2-A<br>2.3-A<br>4.3-A<br>4.3.2-B, 4.3.2-C<br>5.3.2.3-A<br>7.0-A<br>6.2-I<br>6.2-F, 6.2-G, 6.2.1.2-A<br>6.2-G, 6.2.1.2-A<br>2.1-A<br>6.2.1.2-A<br>7.2.2.1.2-A<br>6.9-A<br>6.8-B<br>6.8-B<br>7.8.2-A<br>7.8-A<br>7.8.2-A<br>6.20.3-A<br>6.20.3-A<br>6.2.3-A, 6.2.3-G<br>6.0-A<br>6.2.3-B, 6.2.3-H<br>7.5.2.4-B<br>7.3.2.2-A<br>6.0-A<br>7.2.2.1-A<br>7.2.2.1-A<br>8.3.1-B<br>7.8-A<br>6.13-A<br>6.13-A<br>7.13-A |

| Source | Comment Type | Letter Code | Comment and Response Code   |
|--------|--------------|-------------|-----------------------------|
|        |              | 3GG         | 7.21-E                      |
|        |              | ENVCOM-     | 7.13-A                      |
|        |              | 3HH         | 6.3.2-B, 6.3.2-C            |
|        |              | ENVCOM-3II  | 6.2.3.3-B                   |
|        |              | ENVCOM-3JJ  | 6.2.3.3-B                   |
|        |              | ENVCOM-     | 7.3.2.2-B                   |
|        |              | 3KK         | 6.1.1-A, 6.2.3.5-B          |
|        |              | ENVCOM-     | 5.2-C                       |
|        |              | 3LL         | 5.2-B                       |
|        |              | ENVCOM-     | 7.21-A                      |
|        |              | 3MM         | 6.2.3-B                     |
|        |              | ENVCOM-     | 7.24-D                      |
|        |              | 3NN         | 7.24-A, 7.24-E              |
|        |              | ENVCOM-     | 4.3-G, 7.24-E               |
|        |              | 3OO         | 7.24-B, 7.24-F              |
|        |              | ENVCOM-     | 7.2.2.1-A                   |
|        |              | 3PP         | 7.13-D                      |
|        |              | ENVCOM-     | 7.13.2-D                    |
|        |              | 3QQ         | 8.1-D                       |
|        |              | ENVCOM-     | 8.1-B                       |
|        |              | 3RR         | 8.1-G                       |
|        |              | ENVCOM-     | 7.3.2-A                     |
|        |              | 3SS         | 7.3.4-A                     |
|        |              | ENVCOM-     | 7.3.2.2-A                   |
|        |              | 3TT         | 8.3-B                       |
|        |              | ENVCOM-     | 7.13-E                      |
|        |              | 3UU         | 7.3-D, 8.2-K                |
|        |              | ENVCOM-     | 7.13.2-D, 7.24-G            |
|        |              | 3VV         | 4.3-A                       |
|        |              | ENVCOM-     | 4.3.2-C, 4.3.2-E            |
|        |              | 3WW         | 5.3.2.1-C, 8.2-B            |
|        |              | ENVCOM-     | 4.3.2.2-A                   |
|        |              | 3XX         | 4.3.2.2-C, 4.3.2.2-D, 8.2-C |
|        |              | ENVCOM-     | 4.3-G, 8.2-C                |
|        |              | 3YY         | 4.3-G, 7.8-A                |
|        |              | 3ZZ         | 4.3-G                       |
|        |              | ENVCOM-     | 4.3.2-C                     |
|        |              | 3AAA        | 4.3.2.4-A                   |
|        |              | ENVCOM-     | 5.3-A, 4.3.2-A              |

| Source | Comment Type | Letter Code | Comment and Response Code |
|--------|--------------|-------------|---------------------------|
|        |              | 3BBB        | 4.3-E, 5.5.2.1.4-F        |
|        |              | ENVCOM-     | 7.21-C                    |
|        |              | 3CCC        | 5.3-A                     |
|        |              | ENVCOM-     | 7.21-C                    |
|        |              | 3DDD        | 5.3.2.3-A                 |
|        |              | ENVCOM-     | 5.3.2.3-A, 5.3.2.3-D      |
|        |              | 3EEE        | 5.3.2.1-A, 5.3.2.1-C,     |
|        |              | ENVCOM-     | 5.4.2-A                   |
|        |              | 3FFF        | 5.3.2.2-A                 |
|        |              | ENVCOM-     | 5.3.2.2-A                 |
|        |              | 3GGG        | 5.3.2.2-C                 |
|        |              | ENVCOM-     | 5.4.2-A, 5.4.2-B          |
|        |              | 3HHH        | 8.3.1-A                   |
|        |              | ENVCOM-3III | 8.3.1-B                   |
|        |              | ENVCOM-     | 8.3-A                     |
|        |              | 3JJJ        | 7.24-, 8.3-E              |
|        |              | ENVCOM-     | 8.3.1-A                   |
|        |              | 3KKK        | 7.2.2.2.3-D               |
|        |              | ENVCOM-     | 8.2.B                     |
|        |              | 3LLL        | 7.2-L                     |
|        |              | ENVCOM-     | 8.2-C                     |
|        |              | MMM         | 8.2-C                     |
|        |              | ENVCOM-     | 7.8-A                     |
|        |              | 3NNN        | 8.2-A, 8.2-D              |
|        |              | ENVCOM-     | 8.2-C                     |
|        |              | 3OOO        | 7.14-C                    |
|        |              | ENVCOM-     | 7.15-A                    |
|        |              | 3PPP        | 5.5.2.1.4-E               |
|        |              | ENVCOM-     | 6.14-A                    |
|        |              | 3QQQ        | 6.15-A, 6.15-B            |
|        |              | ENVCOM-     | 7.15-E                    |
|        |              | 3RRR        | 7.14-D                    |
|        |              | ENVCOM-     | 7.14-E                    |
|        |              | 3SSS        | 7.14-F                    |
|        |              | ENVCOM-     | 6.15-C                    |
|        |              | 3TTT        | 7.24-E                    |
|        |              | ENVCOM-     | 5.3.2.2-C, 7.24-I         |
|        |              | 3UUU        | 7.14-G                    |
|        |              | ENVCOM-     | 7.19.2-A                  |
|        |              | 3VVV        |                           |

| Source | Comment Type | Letter Code      | Comment and Response Code |
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|        |              | ENVCOM-<br>www   |                           |
|        |              | ENVCOM-<br>3XXX  |                           |
|        |              | ENVCOM-<br>3YYY  |                           |
|        |              | ENVCOM-<br>3ZZZ  |                           |
|        |              | ENVCOM-<br>AAAA  |                           |
|        |              | ENVCOM-<br>3BBBB |                           |
|        |              | ENVCOM-<br>3CCCC |                           |
|        |              | ENVCOM-<br>3DDDD |                           |
|        |              | ENVCOM-<br>3EEEE |                           |
|        |              | ENVCOM-<br>3FFFF |                           |
|        |              | ENVCOM-<br>3GGGG |                           |
|        |              | ENVCOM-<br>3HHHH |                           |
|        |              | ENVCOM-<br>3III  |                           |
|        |              | ENVCOM-<br>3JJJ  |                           |
|        |              | ENVCOM-<br>3KKKK |                           |
|        |              | ENVCOM-<br>3LLLL |                           |
|        |              | ENVCOM-<br>3MMMM |                           |
|        |              | ENVCOM-<br>3NNNN |                           |
|        |              | ENVCOM-<br>3OOOO |                           |
|        |              | ENVCOM-<br>3PPPP |                           |



| Source | Comment Type | Letter Code   | Comment and Response Code |
|--------|--------------|---------------|---------------------------|
|        |              | ENVCOM-3QQQQ  |                           |
|        |              | ENVCOM-3RRRR  |                           |
|        |              | ENVCOM-3SSSS  |                           |
|        |              | ENVCOM-3TTTT  |                           |
|        |              | ENVCOM-3UUUU  |                           |
|        |              | ENVCOM-3VVVV  |                           |
|        |              | ENVCOM-3WWWW  |                           |
|        |              | ENVCOM-3XXXX  |                           |
|        |              | ENVCOM-3YYYY  |                           |
|        |              | ENVCOM-3ZZZZ  |                           |
|        |              | ENVCOM-3AAAAA |                           |
|        |              | ENVCOM-3BBBBB |                           |
|        |              | ENVCOM-3CCCCC |                           |
|        |              | ENVCOM-3DDDDD |                           |
|        |              | ENVCOM-3EEEE  |                           |
|        |              | ENVCOM-3FFFF  |                           |
|        |              | ENVCOM-3GGGGG |                           |
|        |              | ENVCOM-3HHHHH |                           |
|        |              | ENVCOM-3IIII  |                           |
|        |              | ENVCOM-3JJJJ  |                           |

| Source                              | Comment Type | Letter Code   | Comment and Response Code   |
|-------------------------------------|--------------|---|---|
|                                     |              | ENVCOM-3KKKKK<br>ENVCOM-3LLLLL  |   |
| Environmental Defense               | Spoken       | ED-1A<br>ED-1B<br>ED-1C<br>ED-1D<br>ED-1E<br>ED-1F<br>ED-1G<br>ED-1H<br>ED-1I   | 5.2-A<br>2.3-A<br>5.2-B<br>7.21-D<br>5.2-F<br>7.2-B<br>2.3-A<br>5.5.1.4-A, 5.5.1.4-D<br>7.14-J  |
| Environmental Defense               | Written      | ED-2A<br>ED-2B<br>ED-2C<br>ED-2D<br>ED-2E<br>ED-2F<br>ED-2G<br>ED-2H<br>ED-2I<br>ED-2J<br>ED-2K<br>ED-2L<br>ED-2M<br>ED-2N<br>ED-2O<br>ED-2P<br>ED-2Q | 7.2.2.1-A<br>7.2-B<br>6.2.3-M<br>5.2-F<br>5.2-C<br>6.11-A<br>7.10-C<br>5.3.1.2-A<br>5.3.1.2-A<br>5.3.1.2-A<br>5.3.1.2-A<br>5.3-G, 5.3.2.3.3-A<br>7.15.2-E<br>7.14.2-B<br>7.14-I<br>5.2-A<br>5.0-C |
| Friends of Jerome Park Reservoir    | Written      | FJPR-1  | 7.2-A   |
| Friends of Liberty State Park       | Written      | FLSP-1A<br>FLSP-1B<br>FLSP-1C   | 5.2-C<br>7.10-A<br>7.5.2-A  |
| Garden Club of America              | Spoken       | GCA-1A<br>GCA-1B  | 5.2-A<br>5.2-C  |
| Garden Club of Englewood            | Spoken       | GCE-1   | 5.2-FB*   |
| Greater Paramus Chamber of Commerce | Written      | GPCC-1A<br>GPCC-1B  | 5.2-F<br>5.2-F  |

| Source                             | Comment Type     | Letter Code  | Comment and Response Code   |
|------------------------------------|------------------|--|---|
| Green Delaware                     | Written          | GD-1A<br>GD-1B<br>GD-1C  | 7.0-A<br>5.2-A<br>5.2-E   |
| Hackensack Meadowlands Partnership | Spoken           | HMP-3A<br>HMP-3B<br>HMP-3C<br>HMP-3D<br>HMP-3E<br>HMP-3F<br>HMP-3G<br>HMP-3H<br>HMP-3I<br>HMP-3J<br>HMP-3K<br>HMP-3L<br>HMP-3M<br>HMP-3N<br>HMP-3O<br>HMP-3P<br>HMP-3Q                               | 6.2-K<br>6.0-B<br>5.3.2.3-B<br>8.1-D<br>4.3.2.2-B<br>6.5.3.2-B<br>6.5.3.2-B<br>6.2.2.2-A<br>6.2.3-H<br>6.2-L<br>6.0-B<br>6.2-H<br>6.2.2-A<br>6.2.3.5.2-B<br>7.2-B<br>8.3.3.1-C<br>2.3-A   |
| Hackensack Meadowlands Partnership | Written & Spoken | HMP-4A<br>HMP-4B<br>HMP-4C<br>HMP-4D<br>HMP-4E<br>HMP-4F<br>HMP-4G<br>HMP-4H<br>HMP-4I<br>HMP-4J<br>HMP-4K<br>HMP-4L<br>HMP-4M<br>HMP-4N<br>HMP-4O<br>HMP-4P<br>HMP-4Q<br>HMP-4R<br>HMP-4S<br>HMP-4T | 6.1.2-B<br>6.1.2-B<br>7.23-A<br>6.1.2-B<br>7.13-A<br>6.2.3-L<br>6.2.3-L<br>6.8-B<br>6.0-B<br>6.22-A<br>7.14.2-A<br>7.19.2-A<br>7.19.2-A<br>7.16-A<br>7.22.2-A<br>5.3.2-B<br>4.3-D<br>5.3-F, 5.3.2.3-A<br>5.3.2.1-C, 5.3.2.2-C<br>5.3-G, 5.3.2.3.3-A |

| Source  | Comment Type | Letter Code   | Comment and Response Code  |
|---|--------------|---|--|
|   |              | HMP-4U<br>HMP-4V<br>HMP-4W<br>HMP-4X  | 5.3.2.3-A, 5.3.2.3.1-A<br>7.19-C<br>2.3-A<br>5.2-F   |
| Hackensack Meadowlands Partnership                        | Written      | HMP-2A<br>HMP-2B<br>HMP-2C  | 2.0-I<br>2.0-J<br>5.3-E, 5.3-G, 5.3.2.3.3-A  |
| Hackensack Meadowlands Preservation Alliance              | Spoken       | HMPA-1A<br>HMPA-1B<br>HMPA-1C<br>HMPA-1D<br>HMPA-1E<br>HMPA-1F<br>HMPA-1G<br>HMPA-1H<br>HMPA-1I | 6.22-A<br>6.2-I<br>8.1-D<br>7.2.2.2.3-A<br>4.3.2.2-B<br>7.10-A<br>4.3.2-E<br>7.10-A<br>4.3.2-E |
| Hackensack Meadowlands Preservation Alliance              | Spoken       | HMPA-2  | 4.3.2.2-B  |
| Hackensack Riverkeeper                                    | Spoken       | HRK-1A<br>HRK-1B<br>HRK-1C<br>HRK-1D  | 6.8-B<br>4.3.2-E<br>7.19.2-G<br>5.2-A  |
| Harmon Cove I   | Written      | HCI-1A<br>HCI-1B  | 9.0-B<br>5.2-A   |
| Harmon Cove II  | Written      | HCI-1A<br>HCI-1B  | 9.0-B<br>5.2-A   |
| International Brotherhood of Electrical Workers Local 164 | Spoken       | IBEW164-1A<br>IBEW164-1B  | 5.5*<br>7.19.2-E   |
| International Brotherhood of Electrical Workers Local 164 | Spoken       | IBEW164-2   | 7.19.2-E   |
| International Brotherhood of Electrical Workers Local 164 | Spoken       | IBEW164-3   | 7.19.2-E   |
| J. Fletcher Creamer & Son, Inc.                           | Written      | JFCS-1A<br>JFCS-1B  | 5.5*<br>7.19.2-D   |
| Jomike Corporation  | Written      | JMCORP-1A<br>JMCORP-1B  | 7.13-B<br>7.15.2-A, 7.15.2-C   |
| Jomike Corporation  | Written      | JMCORP-3A<br>JMCORP-3B<br>JMCORP-3C   | 7.13.2-A<br>7.14-D<br>7.16-C   |

| Source   | Comment Type | Letter Code  | Comment and Response Code   |
|--|--------------|--|---|
|  |              | JMCORP-3D<br>JMCORP-3E<br>JMCORP-3F<br>JMCORP-3G   | 7.18-B<br>5.2-F<br>7.14.2-B<br>5.2-A  |
| Jomike Corporation                                 | Written      | JMCORP-4   | 5.2-F   |
| Katy Prairie Conservancy                           | Written      | KPC-1  | 2.1-D   |
| Laborers and Employers Cooperation Education Trust | Spoken       | LECET-1A<br>LECET-1B<br>LECET-1C   | 2.1-E<br>2.1-E<br>7.19.2-E  |
| League of Women Voters of Bergen County            | Spoken       | LWVBC-2A<br>LWVBC-2B<br>LWVBC-2C<br>LWVBC-2D<br>LWVBC-2E<br>LWVBC-2F<br>LWVBC-2G<br>LWVBC-2H | 5.2-D<br>7.22.1.1-A<br>4.3.2-E<br>5.3.2-A<br>4.3.2-E<br>7.3-A<br>8.2-I<br>5.2-F |
| League of Women Voters of Bergen County            | Written      | LWVBC-1A<br>LWVBC-1B   | 5.2-F<br>7.21-A   |
| League of Women Voters of New Jersey               | Written      | LWVNJ-1A<br>LWVNJ-1B<br>LWVNJ-1C<br>LWVNJ-1D<br>LWVNJ-1E                                     | 5.2-D<br>5.3.2-B, 5.3.2-C<br>8.3.2-C<br>7.23-B<br>5.2-E                         |
| Liberty State Park Conservancy                     | Spoken       | LSPC-1A<br>LSPC-1B<br>LSPC-1C<br>LSPC-1D   | 5.3.2.1-C<br>7.21-A<br>5.2-B<br>5.2-E   |
| Little Silver Environmental Commission             | Written      | LSEC-1A<br>LSEC-1B   | 5.2-F<br>7.5-B  |
| Lyndhurst Taxpayers Association                    | Spoken       | LTA-2A<br>LTA-2B<br>LTA-2C   | 4.3.2.2-B<br>5.2-D<br>5.3-E, 5.3.2.3.1-A  |
| Lyndhurst Taxpayers Association                    | Spoken       | LTA-1A<br>LTA-1B<br>LTA-1C   | 5.2-F<br>7.15.2-B<br>7.21-C   |
| Meadowlands Regional Chamber of Commerce           | Spoken       | MRCC-1A<br>MRCC-1B<br>MRCC-1C  | 7.19.2-G<br>5.5*<br>6.2-J   |

| Source   | Comment Type | Letter Code   | Comment and Response Code  |
|--|--------------|---|--|
|  |              | MRCC-1D<br>MRCC-1E<br>MRCC-1F<br>MRCC-1G  | 7.13-B<br>4.3-C<br>7.14.2-D<br>7.22.1.1-A  |
| Meadowlands Regional Chamber of Commerce         | Spoken       | MRCC-3A<br>MRCC-3B<br>MRCC-3C<br>MRCC-3D<br>MRCC-3E<br>MRCC-3F                          | 7.22.1.1-A<br>7.22.1.1-A<br>5.2--F<br>5.3-G, 5.3.2.3.3-A<br>2.1-E<br>5.3.2.3-A         |
| Meadowlands Regional Chamber of Commerce         | Spoken       | MRCC-4A<br>MRCC-4B  | 5.5*<br>7.22.1.1-A   |
| Meadowlands Regional Chamber of Commerce         | Written      | MRCC-2A<br>MRCC-2B  | 7.2.2-A<br>7.21-D  |
| Monmouth County Citizens for Clean Air and Water | Written      | MCCCAW-1A<br>MCCCAW-1B<br>MCCCAW-1C<br>MCCCAW-1D<br>MCCCAW-1E<br>MCCCAW-1F<br>MCCCAW-1G | 6.1.1-A<br>7.2-A<br>6.1.2-B, 6.2.2-B, 6.5.3-A<br>5.2-C<br>5.3.2.1-C<br>5.2-D<br>7.19-C |
| Monmouth County S.P.C.A.                         | Written      | MCSPCA-1A<br>MCSPCA-1B<br>MCSPCA-1C<br>MCSPCA-1D<br>MCSPCA-1E                           | 5.2-F<br>7.19.2-D<br>5.3-E, 5.3.2.1-C<br>7.10-B<br>5.2-C                               |
| Montclair Area League of Women Voters            | Spoken       | MALWV-1   | 4.3.2.2-B  |
| Natural Resources Defense Council                | Spoken       | NRDC-1A<br>NRDC-1B<br>NRDC-1C   | 2.3-A<br>8.3-E<br>7.16-A   |
| Natural Resources Defense Council                | Spoken       | NRDC-2A<br>NRDC-2B<br>NRDC-2C<br>NRDC-2D<br>NRDC-2E<br>NRDC-2F                          | 7.19.2-A<br>5.2-B<br>7.19.2-D<br>5.3.2.3-A<br>6.0-B<br>5.2-E                           |
| Natural Resources Protective Association         | Written      | NRPA-1A<br>NRPA-1B  | 5.2-F<br>6.2.3-C   |

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|--|------------------|---|---|
|  |                  | NRPA-1C<br>NRPA-1D<br>NRPA-1E<br>NRPA-1F<br>NRPA-1G<br>NRPA-1H  | 5.2-F<br>7.14.2-E<br>7.0-C<br>5.3.2.1-C<br>7.0-A<br>5.2-F   |
| New Jersey Alliance for Action               | Written & Spoken | NJAFA-1A<br>NJAFA-1B  | 5.5*<br>7.19.2-E  |
| New Jersey Audubon Society                   | Spoken           | NJAS-2A<br>NJAS-2B<br>NJAS-2C<br>NJAS-2D<br>NJAS-2E<br>NJAS-2F<br>NJAS-2G<br>NJAS-2H<br>NJAS-2I<br>NJAS-2J<br>NJAS-2K<br>NJAS-2L<br>NJAS-2M<br>NJAS-2N<br>NJAS-2O | 5.2-B<br>7.2-B<br>2.3-A<br>7.21.1.1-A<br>5.2-F<br>5.2-F<br>7.2-B<br>8.2-N<br>8.2-G<br>5.3.2-C<br>5.3.2.1-A<br>5.3-G, 5.3.2.3.3-A<br>4.3.2.2-A<br>6.2-J<br>6.2-J |
| New Jersey Audubon Society                   | Written          | NJAS-1A<br>NJAS-1B<br>NJAS-1C<br>NJAS-1D<br>NJAS-1E<br>NJAS-1F<br>NJAS-1G   | 6.5-J<br>7.2.1-C<br>6.2-L<br>6.5-B, 6.5-G<br>6.5-G<br>5.2-C<br>5.2-A  |
| New Jersey Business and Industry Association | Written          | NJBIA-1A<br>NJBIA-1B<br>NJBIA-1C  | 5.5*<br>7.19.2-E<br>5.5*  |
| New Jersey Conservation Foundation           | Spoken           | NJCF-1A<br>NJCF-1B<br>NJCF-1C<br>NJCF-1D<br>NJCF-1E<br>NJCF-1F  | 6.8-C<br>7.19-A<br>7.15-A<br>2.3-D<br>7.19.2-D<br>5.2-C   |

| Source   | Comment Type | Letter Code  | Comment and Response Code   |
|--|--------------|--|---|
|  |              | NJCF-1G  | 6.1.2-B   |
| New Jersey Retail Merchants Association                    | Spoken       | NJRMA-1A<br>NJRMA-1B<br>NJRMA-1C   | 7.19.2-E<br>7.19.2-C<br>7.19.2-C  |
| New Jersey Retail Merchants Association                    | Written      | NJRMA-2A<br>NJRMA-2B<br>NJRMA-2C   | 4.3.2.2*<br>7.19.2-E<br>7.19.2-E  |
| New Jersey Society for Environmental, Economic Development | Written      | NJSEED-1A<br>NJSEED-1B<br>NJSEED-1C<br>NJSEED-1D   | 5.5*<br>7.0-A<br>7.2.2-A<br>7.14.2-D  |
| New Jersey State AFL-CIO                                   | Spoken       | AFLCIO-1A  | 7.19.2-E  |
| New Jersey State AFL-CIO                                   | Written      | AFLCIO-2A<br>AFLCIO-2B<br>AFLCIO-2C<br>AFLCIO-2D<br>AFLCIO-2E<br>AFLCIO-2F   | 5.5*<br>7.19.2-E<br>7.19.2-E<br>7.19.2-E<br>5.5*<br>7.15.2-E  |
| New Jersey State Building and Construction Trades Council  | Spoken       | NJBCTC-1A<br>NJBCTC-1B<br>NJBCTC-1C<br>NJBCTC-1D   | 2.1-E<br>7.19.2-E<br>7.19.2-E<br>5.5-A  |
| New York – New Jersey Baykeeper                            | Spoken       | NYNJBK-2A<br>NYNJBK-2B<br>NYNJBK-2C<br>NYNJBK-2D<br>NYNJBK-2E<br><br>NYNJBK-2F<br>NYNJBK-2G<br>NYNJBK-2H<br>NYNJBK-2I<br>NYNJBK-2J | 7.0-C<br>4.3.2.2-A<br>5.3-A<br>4.3-A<br>5.3-E, 5.3.2.3-A,<br>5.3.2.3.1-A<br><br>7.0-A<br>2.0-A<br>5.2-F<br>5.2-E<br>2.3-A |
| New York – New Jersey Baykeeper                            | Spoken       | NYNJBK-3A<br>NYNJBK-3B<br>NYNJBK-3C<br>NYNJBK-3D<br>NYNJBK-3E<br>NYNJBK-3F   | 5.3.2-B<br>5.3-B<br>4.3.2-E<br>5.3.2.3-A<br>5.3-G<br>5.2-A  |



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|---|--------------|--|--|
| New York – New Jersey Baykeeper         | Spoken       | NYNJBK-1A<br>NYNJBK-1B<br>NYNJBK-1C<br>NYNJBK-1D<br>NYNJBK-1E<br>NYNJBK-1F<br>NYNJBK-1G<br>NYNJBK-1H<br>NYNJBK-1I<br>NYNJBK-1J | 5.2-B<br>7.22.1.1-A<br>6.1.2-B<br>6.8-A<br>7.2-B<br>6.10-A<br>7.16-E<br>7.22.1.1-A<br>5.3.2.3-A<br>5.3.2.3-A |
| Northern Regional Council of Carpenters | Spoken       | NRCC-1A<br>NRCC-1B<br>NRCC-1C  | 7.19.2-E<br>2.1-E<br>7.19.2-E  |
| Northern Regional Council of Carpenters | Spoken       | NRCC-2   | 7.19.2-E   |
| Northern Regional Council of Carpenters | Spoken       | NRCC-3A<br>NRCC-3B   | 7.0-A<br>7.19.2-E  |
| Northern Regional Council of Carpenters | Spoken       | NRCC-4A<br>NRCC-4B   | 7.0-A<br>7.19.2-E  |
| NY/NJ Harbor Estuary Program            | Spoken       | NYNJHEP-1A<br>NYNJHEP-1B   | 5.2-D<br>5.2-C   |
| Othenberg-Sylvette Corp.                | Written      | OSC-1A<br>OSC-1B<br>OSC-1C   | 7.5.2-A<br>7.15.2-B<br>4.3.2.2-B   |
| Plumbers Local 14                       | Spoken       | PLMB14-1A<br>PLMB14-1B   | 5.5*<br>6.2.3-M  |
| Regional Plan Association               | Spoken       | RPA-1A<br>RPA-1B<br>RPA-1C<br>RPA-1D<br>RPA-1E<br>RPA-1F<br>RPA-1G<br>RPA-1H   | 7.21.1.1-A<br>6.10-A<br>6.20.3-A<br>7.21.1.1-A<br>5.3.2-B<br>7.15-B<br>5.2-F<br>7.19.2-D                     |
| Regional Plan Association               | Written      | RPA-2A<br>RPA-2B<br>RPA-2C   | 7.14-H<br>2.3-A<br>7.21.1.1-A, 7.21.1.1-B  |
| Rutherford Downtown Partnership         | Spoken       | RDP-1A<br>RDP-1B<br>RDP-1C   | 7.19.2-B<br>7.19.2-B<br>7.19.2-B   |

| Source                                    | Comment Type | Letter Code   | Comment and Response Code  |
|---|--------------|---|--|
| Secaucus Memorial Ladies Auxiliary #3776  | Written      | SMLA-1A<br>SMLA-1B  | 5.2-F<br>5.2-C   |
| Sheet Metal Workers Local 25              | Spoken       | SMW25-1A<br>SMW25-1B  | 6.15-A<br>5.3.2.3-A  |
| Sierra Club-Hudson County                 | Spoken       | SCHC-1A<br>SCHC-1B<br>SCHC-1C<br>SCHC-1D<br>SCHC-1E<br>SCHC-1F<br>SCHC-1G<br>SCHC-1H                                      | 8.2-H<br>6.1.2-A<br>5.2-B<br>5.2-B<br>7.10-A<br>4.3.2.2-A<br>5.3.2.3-A, 5.3.2.3.1-A<br>5.2-C, 5.2-F  |
| Sierra Club-New Jersey                    | Spoken       | SCNJ-1A<br>SCNJ-1B<br>SCNJ-1C<br>SCNJ-1D<br>SCNJ-1E<br>SCNJ-1F<br>SCNJ-1G<br>SCNJ-1H                                      | 5.3.2-B<br>5.0-C<br>8.3.3.1-C<br>4.3.2.2-B<br>5.2-B<br>5.3.2-B<br>7.19.2-E<br>7.0-C  |
| Sierra Club-New Jersey                    | Spoken       | SCNJ-2A<br>SCNJ-2B<br>SCNJ-2C<br>SCNJ-2D<br>SCNJ-2E   | 6.20.3-A<br>6.10-A<br>4.3.2-B<br>9.0-C<br>4.3.2-E  |
| Southern Appalachian Biodiversity Project | Written      | SABP-1  | See Form 1   |
| Transit Committee of Bergen County        | Written      | TCBC-1A<br>TCBC-1B<br>TCBC-1C<br>TCBC-1D<br>TCBC-1E<br>TCBC-1F<br><br>TCBC-1G<br>TCBC-1H<br>TCBC-1I<br>TCBC-1J<br>TCBC-1K | 5.5.2.1.2-A<br>7.15.2-E<br>5.5.2.1.2-B<br>5.5.2.1.2-B<br>7.14.2A<br>7.3.2.2-A, 7.3.2.2-D<br>7.14.2-B<br>7.14.2-B<br>7.14.2-B<br>7.15.2-A<br>7.14.2-E |
| Tri-State Transportation Campaign         | Written      | TSTC-1A   | 5.2-F  |

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|-----------------------------------|--------------|-------------|---------------------------|
|                                   |              | TSTC-1B     | 7.3.2.2-A                 |
|                                   |              | TSTC-1C     | 7.10-A                    |
|                                   |              | TSTC-1D     | 7.14-D                    |
|                                   |              | TSTC-1E     | 7.24-I                    |
|                                   |              | TSTC-1F     | 7.15.2-B                  |
|                                   |              | TSTC-1G     | 7.16.2-D                  |
|                                   |              | TSTC-1H     | 7.16.2.3-B                |
|                                   |              | TSTC-1I     | 2.0-A                     |
| Weehawken Environmental Committee | Written      | WEC-1A      | 7.21-A                    |
|                                   |              | WEC-1B      | 5.2-C                     |
|                                   |              | WEC-1C      | 7.2-A                     |
|                                   |              | WEC-1D      | 5.2-E                     |
|                                   |              | WEC-1E      | 5.3.2.1-C                 |
| Woman's Club of North Hudson      | Written      | WCNH-1A     | 5.2-C                     |
|                                   |              | WCNH-1B     | 5.2-F                     |
|                                   |              | WCNH-1C     | 4.3.2.2-B                 |
|                                   |              | WCNH-1D     | 7.10-A                    |
| <b>Individuals</b>                |              |             |                           |
| Ackerman, Barbara R. & Gerald W.  | Written      | ACK-2A      | 5.2-F                     |
|                                   |              | ACK-2B      | 5.2-C                     |
| Affrunti, Patricia                | Written      | AFF-1A      | 7.0-G                     |
|                                   |              | AFF-1B      | 4.3.2-B                   |
| Agresta, Charlotte & Joseph       | Written      | AGR-1       | 7.15.2-B                  |
| Alama, Pauline                    | Spoken       | ALA-2A      | 7.15-B                    |
|                                   |              | ALA-2B      | 5.3.2.3-A                 |
|                                   |              | ALA-2C      | 7.13-A                    |
| Alama, Pauline J.                 | Written      | ALA-1A      | 7.15.2-B                  |
|                                   |              | ALA-1B      | 7.19.2-B                  |
| Albert, Eileen & Jack             | Written      | ALB-2       | 7.5-B                     |
| Albina, M.                        | Written      | ALB-3A      | 7.15-B                    |
|                                   |              | ALB-3B      | 7.13.2-B                  |
|                                   |              | ALB-3C      | 7.16-A                    |
| Albro, Anne C.                    | Written      | ALB-1A      | 7.15-B                    |
|                                   |              | ALB-1B      | 7.13-A                    |
| Allen, Charles                    | Written      | ALL-3       | 6.13-B                    |
| Allison, Shelley G.               | Written      | ALL-1A      | 4.3.2.2-B                 |
|                                   |              | ALL-1B      | 5.3.2.1-C                 |
|                                   |              | ALL-1C      | 7.10-A                    |
| Allured, William F. & Alice D.    | Written      | ALL-4A      | 4.3.2.2-A                 |

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|----------------------------|------------------|--|--|
|                            |                  | ALL-4B   | 4.3.2.2-B, 5.3.2-B   |
| Alvarado, Rod              | Spoken           | ALV-1  | 7.19.2-E   |
| Ambrosio, Louis            | Written & Spoken | AMB-2A<br>AMB-2B<br>AMB-2C<br>AMB-2D<br>AMB-2E               | 4.3.2.2-A<br>7.15-B<br>7.16-A<br>7.13-A<br>5.2-A   |
| Ambrosio, Richard          | Written          | AMB-1  | 7.15-B   |
| Andrew, Joyce & John       | Written          | AND-1A<br>AND-1B   | 5.2-C<br>6.1.2-A   |
| Anema, Barbara E.          | Written          | ANE-1  | 5.2-B  |
| Angowski, Jean             | Written          | ANG-1  | 4.3.2.2-B  |
| Anlian, Bonnie             | Written          | ANL-1  | 6.15-A   |
| Antoniotti, Umberto        | Written          | ANT-1  | 4.3.2.2-B  |
| Anzevino, Janice           | Spoken           | ANZ-1  | 5.5*   |
| Arcadio, Peter             | Spoken           | ARC-2  | 5.5*   |
| Arciszewski, Elaine        | Written          | ARC-1  | 5.2-F  |
| Arnold, Scott P.           | Written          | ARN-1A<br>ARN-1B<br>ARN-1C<br>ARN-1D<br>ARN-1E               | 5.2-F<br>4.3.2-C<br>7.2.2-B<br>4.3.2-C<br>7.2-A  |
| Aryel, Ron                 | Written          | ARY-1A<br>ARY-1B<br>ARY-1C<br>ARY-1D<br>ARY-1E<br><br>ARY-1F | 5.2-F<br>7.1-A, 7.19-C, 7.18-A<br>5.2-C<br>6.2.3-C, 6.2.3-D, 7.19-D,<br>7.18-A, 6.2.3-E<br>7.16.2-B<br>5.2-C |
| Ashtyani, Laura            | Spoken           | ASH-1A<br>ASH-1B   | 5.2-A<br>4.3.2-A   |
| Avila, Juan                | Written          | AVI-1  | 5.2-C  |
| Aufderhar, Joan            | Written          | AUF-1  | 5.2-B  |
| Babbott, Mr. & Mrs. Edward | Written          | BAB-1  | 5.2-F  |
| Bagwell, Rosemary          | Written          | BAG-3  | 5.2-F  |
| Bakic, Tracy               | Written          | BAK-1  | 5.2-C  |
| Baralamenti, Sal           | Spoken           | BAR-5A<br>BAR-5B   | 7.14-J<br>7.13.2-B   |
| Baran, Lisa                | Written          | BAR-3  | 6.1.1-A  |

| Source                  | Comment Type | Letter Code                          | Comment and Response Code                 |
|-------------------------|--------------|--------------------------------------|---|
| Barbieri, Susan         | Written      | BAR-8                                | 5.2-F                                     |
| Barker, Diane & Bill    | Written      | BAR-2                                | 4.3.2.2-B                                 |
| Barker, John            | Written      | BAR-4                                | 5.2-C                                     |
| Barron, Anne            | Written      | BAR-1A<br>BAR-1B                     | 7.15.2-B<br>7.16.2-B                      |
| Bartoli, Rose           | Spoken       | BAR-6A<br>BAR-6B<br>BAR-6C<br>BAR-6D | 7.14.2-B<br>7.15-B<br>5.3.2-A<br>7.13.2-B |
| Basioli, Maja           | Written      | BAS-1A<br>BAS-1B<br>BAS-1C           | 5.2-B<br>7.15.2-B<br>7.19.2-B             |
| Bayard, Judy            | Written      | BAY-1                                | 5.2-F                                     |
| Beaumont, Natalie       | Written      | BEA-2A<br>BEA-2B<br>BEA-2C           | 5.2-F<br>4.3.2.2-B<br>7.0-A               |
| Beavin, John & L.       | Written      | BEA-3A<br>BEA-3B                     | 5.2-B<br>5.2-C                            |
| Becker, George & Alice  | Written      | BEC-1                                | 5.2-F                                     |
| Becker, Mark            | Spoken       | BEC-3A<br>BEC-3B<br>BEC-3C           | 2.3-A<br>7.10-A<br>5.2-B                  |
| Benson, Eileen & Robert | Written      | BEN-1                                | 5.2-F                                     |
| Berson, Anita           | Written      | BER-3                                | 6.5.2-A                                   |
| Bevacqua, Lucy          | Written      | BEV-1A<br>BEV-1B                     | 4.3.2.2-B<br>6.2-I                        |
| Beyer, Daniel           | Spoken       | BEY-1                                | 7.19.2-E                                  |
| Bharucha, Evelyn & B.   | Written      | BHA-1A<br>BHA-1B<br>BHA-1C<br>BHA-1D | 7.2-A<br>7.15.2-D<br>6.10-B<br>4.3.2.2-B  |
| Bialkowski, Martha      | Written      | BIA-1A<br>BIA-1B                     | 5.2-F<br>2.1-E                            |
| Biegel, Theodora M.     | Written      | BIE-1                                | 5.2-A                                     |
| Bijlani, Pranita        | Written      | BIJ-1A<br>BIJ-1B                     | 5.2-F<br>6.5-I                            |
| Bilenky, June           | Written      | BIL-1                                | 5.3.2.1-C                                 |
| Black, Andy             | Written      | BLA-1                                | 5.3.2.1-C                                 |
| Bodwell, Amy            | Written      | BOD-1A                               | 5.3.2.1-C                                 |

| Source                       | Comment Type | Letter Code                                    | Comment and Response Code                           |
|------------------------------|--------------|--|---|
|                              |              | BOD-1B   | 6.2-M   |
| Bohan, Patty M.              | Written      | BOH-1A<br>BOH-1B<br>BOH-1C<br>BOH-1D           | 5.2-F<br>7.14.2-E<br>4.3.2.2-B<br>7.20-A            |
| Bolasci, Janet               | Written      | BOL-1A<br>BOL-1B                               | 5.2-A<br>4.3.2.2-B                                  |
| Boldt, Agnes                 | Written      | BOL-2  | 7.13.2-B  |
| Bone Jr., Alan D.            | Spoken       | BON-1  | 7.19.2-E  |
| Bordone, James D.            | Written      | BOR-1A<br>BOR-1B<br>BOR-1C<br>BOR-1D<br>BOR-1E | 5.2-F<br>7.0-G<br>7.13.2-C<br>7.14.2-B<br>5.3.2.1-C |
| Borea, Phyllis Gilbert       | Written      | BOR-2  | 5.2-C   |
| Bowen, Margaret              | Written      | BOW-1A<br>BOW-1B<br>BOW-1C<br>BOW-1D           | 5.2-A<br>7.13.2-A<br>4.3.2.2-A<br>7.15.2-B          |
| Bowler, Elbert J.            | Written      | BOW-3A<br>BOW-3B                               | 7.23-B<br>7.19.2-C                                  |
| Bowler, Howard               | Written      | BOW-4  | 7.10-A  |
| Bowling, Beth & Gene         | Written      | BOW-2  | 5.2-C   |
| Braidech, Abbey              | Written      | BRA-1  | 7.14-D  |
| Brandon, Nick                | Spoken       | BRA-2A<br>BRA-2B                               | 7.19.2-E<br>2.1-E                                   |
| Brennan, Matthew             | Written      | BRE-1A<br>BRE-1B                               | 7.0-A<br>7.5-A                                      |
| Brolewicz, Patricia J.       | Written      | BRO-3  | 5.2-F   |
| Brotherton, John             | Spoken       | BRO-5  | 5.2-F   |
| Brown, Carol Ann             | Written      | BRO-2A<br>BRO-2B                               | 4.3.2.2-B<br>7.15-B                                 |
| Brown, Nancy & Eugene        | Written      | BRO-6  | 7.2-B   |
| Brunell, Susanne & Albert L. | Written      | BRU-2  | 5.2-A   |
| Bruno, Charles & Marie       | Written      | BRU-1  | 5.2-F   |
| Brusco, Barbara              | Spoken       | BRU-8A<br>BRU-8B<br>BRU-8C<br>BRU-8D           | 5.2-F<br>4.3.2-E<br>7.19.2-C<br>5.2-B               |

| Source                | Comment Type | Letter Code                                    | Comment and Response Code                            |
|-----------------------|--------------|--|--|
| Brusco, Barbara V.    | Written      | BRU-5A<br>BRU-5B<br>BRU-5C                     | 4.3.2.2-A<br>7.10-A<br>5.3.2.1-C                     |
| Brusco, Barbara V.    | Written      | BRU-6A<br>BRU-6B<br>BRU-6C<br>BRU-6D<br>BRU-6E | 5.2-F<br>7.13.2-C<br>8.3.43.1-C<br>7.0-A<br>7.15.2-B |
| Brusco, Mary          | Written      | BRU-7A<br>BRU-7B<br>BRU-7C<br>BRU-7D<br>BRU-7E | 5.2-F<br>7.13.2-C<br>8.3.3.1-C<br>7.0-A<br>7.15.2-B  |
| Buczek, Helen R.      | Written      | BUC-1A<br>BUC-1B<br>BUC-1C                     | 5.2-F<br>7.0-G<br>7.15.2-B                           |
| Burnsky III, Frank J. | Spoken       | BUR-3  | 5.5*   |
| Buzas, Robert         | Written      | BUZ-2  | 7.10-A   |
| Calenti, Joanne       | Spoken       | CAL-3A<br>CAL-3B                               | 5.3.2-B<br>6.10-A                                    |
| Callari, Joseph       | Spoken       | CAL-1  | 5.5*   |
| Cameron, Shirley B.   | Written      | CAM-1A<br>CAM-1B<br>CAM-1C<br>CAM-1D           | 5.2-B<br>6.2-K, 6.23.5-A<br>7.0-G<br>7.19.2-B        |
| Campbell, Christopher | Written      | CAM-3A<br>CAM-3B<br>CAM-3C                     | 4.3.2.2-B<br>7.10-A<br>5.2-A                         |
| Campbell, W. Robert   | Written      | CAM-2A<br>CAM-2B                               | 5.3.2.1-C<br>7.16.2-B                                |
| Campion, Bill         | Spoken       | CAM-6A<br>CAM-6B<br>CAM-6C                     | 5.2-C<br>8.2-I<br>5.3.2.3-A                          |
| Campo, Leslie         | Spoken       | CAM-7A<br>CAM-7B<br>CAM-7C                     | 4.3.2.2-B<br>7.15-B<br>8.2-C                         |
| Cannon, Mary E.       | Written      | CAN-1  | 5.2-C  |
| Caprio, G. Thomas     | Written      | CAP-1A<br>CAP-1B                               | 5.2-F<br>7.0-G                                       |

| Source                      | Comment Type | Letter Code  | Comment and Response Code   |
|-----------------------------|--------------|--|---|
|                             |              | CAP-1C   | 5.2-C   |
| Carlough, Ruth              | Written      | CAR-1A<br>CAR-1B<br>CAR-1C<br>CAR-1D<br>CAR-1E                     | 5.2-F<br>4.3.2.2-B<br>7.5.2-A<br>7.14.2-E<br>5.3.2.3.1-A                            |
| Carlson, James              | Written      | CAR-3  | 5.5*  |
| Carney, Mary                | Written      | CAR-5A<br>CAR-5B   | 5.2-A<br>5.2-C  |
| Carroll, Michael            | Written      | CAR-4  | 5.2-A   |
| Carter, G. & Ellen          | Written      | CAR-8  | 5.2-F   |
| Caruso, Barbara             | Written      | CAR-6  | 4.3.2.2-B   |
| Caruso, Richard             | Spoken       | CAR-7  | 7.19.2-E  |
| Casagrande, Margaret        | Written      | CAS-2A<br>CAS-2B<br>CAS-2C<br>CAS-2D<br>CAS-2E                     | 7.19.2-D<br>7.21-E<br>7.19.2-B<br>7.10-A<br>7.15-B                                  |
| Cataldo, Jeffrey            | Spoken       | CAT-1  | 5.5*  |
| Cella, Anthony J.           | Written      | CEL-1  | 5.2-A   |
| Ceragno, Kevin              | Written      | CER-2A<br>CER-2B   | 4.3.2.2-B<br>5.5.2.1.2-A  |
| Cerasuolo, Sandra & Wallace | Written      | CER-1A<br>CER-1B<br>CER-1C<br>CER-1D                               | 7.15.2-B<br>7.5.2-A<br>7.20-A<br>4.3.2.2-B  |
| Cesnik, Eric                | Written      | CES-1  | 5.3.2.1-C   |
| Chack, John & Joanne        | Written      | CHA-1A<br>CHA-1B<br>CHA-1C<br>CHA-1D<br>CHA-1E<br>CHA-1F<br>CHA-1G | 4.3.2.2-B<br>7.16.2-B<br>7.15.2-B<br>5.3.2.1-C<br>7.2.2-B<br>7.3.2.2-E<br>5.3.2.1-C |
| Chagaris, Heather           | Written      | CHA-8  | 5.2-F   |
| Chambarry, Christ           | Written      | CHA-5A<br>CHA-5B   | 5.3.2.1-C<br>4.3.2.2-B  |
| Chasnow, Jo-Anne            | Written      | CHA-3A<br>CHA-3B   | 7.15.2-B<br>7.10-A  |



| Source                 | Comment Type | Letter Code                          | Comment and Response Code                |
|------------------------|--------------|--------------------------------------|--|
|                        |              | CHA-3C                               | 5.2-C                                    |
| Chasnow, Ruth R.       | Written      | CHA-4A<br>CHA-4B                     | 4.3.2.2-B<br>5.2-C                       |
| Chesonis, Joseph       | Spoken       | CHE-1A<br>CHE-1B<br>CHE-1C<br>CHE-1D | 7.19.2-D<br>5.2-F<br>5.2-F<br>7.22.1.1-A |
| Chin, Meiling          | Written      | CHI-1                                | 7.0-A                                    |
| Church, JoAnne         | Written      | CHU-1                                | 5.2-B                                    |
| Cianfrone, Lorraine    | Spoken       | CIA-1A                               | 7.19.2-E                                 |
| Clare, Dorothy K.      | Written      | CLA-4                                | 5.2-F                                    |
| Clark, Michael         | Written      | CLA-1A<br>CLA-1B                     | 5.2-F<br>5.3.2.1-C                       |
| Cobron, Kenneth        | Spoken       | COB-1                                | 6.2.3-N                                  |
| Cocks, Jan             | Written      | COC-1                                | 4.3.2.2-B                                |
| Collins, Wallace E.J.  | Written      | COL-1A<br>COL-1B<br>COL-1C           | 5.2-F<br>7.13.2-C<br>7.19.2-C            |
| Comis, Tim             | Written      | COM-1                                | 5.2-B                                    |
| Conley, Doris          | Spoken       | CON-8A<br>CON-8B<br>CON-8C<br>CON-8D | 4.3.2.2-B<br>6.15-A<br>7.23-B<br>7.10-A  |
| Conley, Lynn           | Spoken       | CON-7A<br>CON-7B                     | 4.3.2.2-B<br>5.2-F                       |
| Connelly, Audrey       | Written      | CON-3A<br>CON-3B<br>CON-3C           | 5.2-F<br>7.14.2-A<br>4.3.2-C             |
| Constantin, Elyse C.   | Written      | CON-1                                | 5.2-F                                    |
| Constantine, Barbara   | Spoken       | CON-9A<br>CON-9B                     | 5.2-F<br>5.3.2.3.1-A                     |
| Constantine, Michael   | Spoken       | CON-10                               | 5.2-F                                    |
| Constantine, Thomas M. | Written      | CON-2                                | 5.2-F                                    |
| Cooper, Darren C.      | Spoken       | COO-1                                | 7.19.2-E                                 |
| Copolla, Alfonse Vito  | Written      | COP-1                                | 5.2-F                                    |
| Corio, Pam             | Written      | COR-3                                | 5.2-C                                    |
| Coronato, Carol        | Written      | COR-1A<br>COR-1B                     | 7.10-B<br>4.3.2.2-B                      |
| Cotter, Daniel         | Spoken       | COT-1A                               | 7.19.2-E                                 |

| Source              | Comment Type | Letter Code                                    | Comment and Response Code                           |
|---------------------|--------------|--|---|
| Cox, Jorene A.      | Written      | COX-1A<br>COX-1B                               | 7.10-A<br>5.2-F                                     |
| Cozzi, John V.      | Written      | COZ-1A<br>COZ-1B                               | 7.15.2-B<br>4.3.2.2-B                               |
| Crain, William      | Spoken       | CRA-1  | 5.2-B   |
| Crane, Marilyn W.   | Written      | CRA-2  | 5.2-A   |
| Crisanto, M.L.      | Written      | CRI-1  | 5.2-F   |
| Crocetta, Elizabeth | Written      | CRO-1A<br>CRO-1B<br>CRO-1C<br>CRO-1D<br>CRO-1E | 4.3.2.2-B<br>7.13.2-A<br>7.8-A<br>7.5-B<br>7.19.2-C |
| Crook, Hannah       | Written      | CRO-2A<br>CRO-2B                               | 6.2-K, 6.2.3.5-A<br>5.2-C                           |
| Crusius, Elsbeth    | Written      | CRU-1  | 5.2-F   |
| Cyphers, David      | Written      | CYP-1A<br>CYP-1B<br>CYP-1C                     | 5.5*<br>7.14.2-D<br>7.10-A                          |
| Dahlman, Patricia   | Written      | DAH-1A<br>DAH-1B                               | 5.2-A<br>7.0-G                                      |
| Dal Cerro, Michael  | Written      | DAL-1A<br>DAL-1B                               | 5.2-A<br>7.0-G                                      |
| Dalessio, James     | Spoken       | DAL-5A<br>DAL-5B                               | 7.19.2-E<br>2.1-E                                   |
| Daley, George E.    | Written      | DAL-2A<br>DAL-2B<br>DAL-2C<br>DAL-2D           | 4.3.2.2-B<br>7.13.2-C<br>7.15.2-F<br>7.19.2-B       |
| Davion, Charles     | Spoken       | DAV-2  | 7.19.2-E  |
| Davis, Thomas R.    | Written      | DAV-1A<br>DAV-1B<br>DAV-1C                     | 5.5*<br>7.2.1-C<br>7.19.2-D                         |
| De Bouter, John     | Spoken       | DEB-1A<br>DEB-1B<br>DEB-1C<br>DEB-1D<br>DEB-1E | 5.5*<br>7.10-B<br>7.13.2-B<br>7.19.2-E<br>7.19.2-E  |
| De Bouter, John     | Spoken       | DEB-2A<br>DEB-2B                               | 7.19.2-E<br>6.15-A                                  |

| Source                      | Comment Type | Letter Code  | Comment and Response Code   |
|-----------------------------|--------------|--|---|
| De Leasa, Robert            | Spoken       | DEL-4A<br>DEL-4B<br>DEL-4C<br>DEL-4D<br>DEL-4E                     | 5.3.2-B<br>7.15.2-F<br>7.15.2-B<br>7.19.2-G<br>7.13.2-C                         |
| De Lellis, Angelo           | Written      | DEL-3  | 7.19.2-D  |
| De Leon, Nestor             | Spoken       | DEL-7  | 7.19.2-E  |
| De Marco, Mary Anne         | Written      | DEM-1A<br>DEM-1B   | 5.2-F<br>8.2-C  |
| De Stefano, Rhonda          | Written      | DES-1A<br>DES-1B<br>DES-1C   | 8.3.1-B<br>5.3.2.1-C<br>7.14-H  |
| Decker, Harry               | Spoken       | DEC-2B   | 5.3.2.3-A   |
| Decker, Harry J.            | Written      | DEC-1A<br>DEC-1B<br>DEC-1C<br>DEC-1D<br>DEC-1E<br>DEC-1F<br>DEC-1G | 5.3.2.1-C<br>7.13.2-A<br>7.5.2-A<br>7.3.2.2-F<br>7.16.2-B<br>7.13.2-C<br>7.10-A |
| Del Guidice, Joe            | Spoken       | DEL-6  | 7.19.2-E  |
| DeLeon, Christine           | Written      | DEL-5A<br>DEL-5B   | 5.2-B<br>4.3.2.2-B  |
| Della Fave, Cathy           | Written      | DEL-1A<br>DEL-1B   | 7.13.2-B, 7.15.2-B<br>4.3.2.2-B   |
| Demarest, John W.           | Written      | DEM-3  | 7.10-A  |
| Desjardins, Don E.          | Spoken       | DES-2  | 7.19.2-E  |
| Detor, Jessica              | Written      | DET-1A<br>DET-1B   | 5.2-A<br>7.0-G  |
| Dette, Evelyn M.            | Written      | DET-2A<br>DET-2B<br>DET-2C<br>DET-2D<br>DET-2E                     | 7.2-B<br>7.10-B<br>5.2-C<br>5.3-G, 5.3.2.3.3-A<br>5.3-E, 5.3.2.1-C              |
| Devaney, Mr. & Mrs. Patrick | Written      | DEV-2  | 5.2-F   |
| Devaney, Patricia           | Spoken       | DEV-3A<br>DEV-3B   | 4.3.2.2-B<br>7.15-B   |
| Devereaux, Catherine        | Written      | DEV-1  | 5.2-C   |
| Devine, Dana                | Spoken       | DEV-4A   | 7.0-A   |

| Source                   | Comment Type | Letter Code                          | Comment and Response Code            |
|--------------------------|--------------|--------------------------------------|--------------------------------------|
|                          |              | DEV-4B<br>DEV-4C                     | 7.16-A<br>5.3.2-A                    |
| Di Modugno, Giuseppe     | Written      | DIM-1A<br>DIM-1B                     | 4.3.2-E<br>7.15.2-B                  |
| DiGiovanni, Antony       | Written      | DIG-1                                | 6.13-C                               |
| DiMotta, Doug            | Spoken       | DIM-2                                | 7.19.2-E                             |
| Dinger, Marilyn          | Written      | DIN-2                                | 7.10-A                               |
| Dinzik, Helen L.         | Written      | DIN-1                                | 7.10-A                               |
| Dixon, Andrew            | Spoken       | DIX-1                                | 7.19.2-E                             |
| Doak, Mae                | Written      | DOA-1                                | 7.13.2-C                             |
| Dodds, Robin             | Written      | DOD-2                                | 5.2-E                                |
| Domber, Edward           | Written      | DOM-1A<br>DOM-1B                     | 7.0-G<br>5.3.2.1-C                   |
| Donovan, Marguerite      | Written      | DON-1                                | 6.2-M                                |
| Douglass, Patricia       | Written      | DOU-1A<br>DOU-1B                     | 5.0-C<br>5.3.2.1-C                   |
| Dresner, Adele           | Written      | DRE-2A<br>DRE-2B<br>DRE-2C           | 5.2-A<br>7.21-E<br>7.24-B            |
| Dresner, Roberta Miskuff | Written      | DRE-3A<br>DRE-3B                     | 5.2-A<br>7.0-A                       |
| Dressel, Richard         | Written      | DRE-1A<br>DRE-1B<br>DRE-1C<br>DRE-1D | 6.2.3-M<br>5.2-E<br>7.19.2-E<br>5.5* |
| Driscoll, Marie          | Written      | DRI-1A<br>DRI-1B                     | 7.13.2-C<br>7.16.2-B                 |
| Druther, Bob             | Spoken       | DRU-1                                | 5.5*                                 |
| Ducca, Mary E.           | Written      | DUC-1                                | 5.2-F                                |
| Dull, John               | Spoken       | DUL-1                                | 7.0-G                                |
| Dwyer, Dennis & Laura    | Written      | DWY-1A<br>DWY-1B                     | 7.14.2-A<br>7.13.2-B                 |
| Dzielak, Charlene        | Written      | DZI-1                                | 7.15-B                               |
| Eastman, Christopher     | Written      | EAS-1A<br>EAS-1B<br>EAS-1C           | 7.21-D<br>7.15.2-D<br>7.19-C         |
| Easton, Darren           | Written      | EAS-2                                | 5.5*                                 |
| Edwards, David & Peggy   | Written      | EDW-1                                | 5.2-C                                |
| Egan, John A.            | Written      | EGA-1                                | 5.2-F                                |

| Source                         | Comment Type | Letter Code                          | Comment and Response Code                   |
|--------------------------------|--------------|--------------------------------------|---|
| Elsasser, April R.             | Written      | ELS-1A<br>ELS-1B                     | 5.2-B<br>7.14.2-B                           |
| Englander, Donald L. & Emmylou | Written      | ENG-1A<br>ENG-1B<br>ENG-1C<br>ENG-1D | 5.2-F<br>5.3.2.1-C<br>7.4-A<br>5.2-C        |
| Ensign, Yester D.              | Spoken       | ENS-2A<br>ENS-2B                     | 5.2-A<br>5.2-F                              |
| Ensign, Yester D.              | Written      | ENS-1                                | 5.2-B                                       |
| Eremin, Lois M.                | Written      | ERE-1                                | 5.2-F                                       |
| Esposito, Rose                 | Written      | ESP-2                                | 7.16.2-B                                    |
| Essig, Beatrice                | Written      | ESS-1                                | 5.2-B                                       |
| Estes, Anne                    | Written      | EST-1                                | 5.2-F                                       |
| Etzi, Susan                    | Written      | ETZ-1A<br>ETZ-1B                     | 7.15.2-B<br>5.2-F                           |
| Feliciano, Joyce               | Written      | FEL-2                                | 4.3.2.2-B                                   |
| Ferrara, Franklin              | Written      | FER-1A<br>FER-1B<br>FER-1C<br>FER-1D | 5.2-F<br>4.3.2.2-B<br>7.15.2-B<br>5.3.2.1-C |
| Ferrett, Veronica              | Spoken       | FER-2A<br>FER-2B<br>FER-2C           | 6.2.3-C<br>8.3.3.1-C<br>5.3.2.1-C           |
| Flanagan, Margaret             | Written      | FLA-1                                | 5.2-F                                       |
| Florio, Daniel & Geraldine     | Written      | FLO-1A<br>FLO-1B                     | 7.13.2-B<br>7.15.2-B                        |
| Fluet, Robert                  | Written      | FLU-1                                | 5.2B  |
| Forman, Jack & Helene          | Written      | FOR-1                                | 6.13-B                                      |
| Francis, Dorothy M.            | Written      | FRA-3                                | 7.13.2-A                                    |
| Frank, Linda M.                | Written      | FRA-4A<br>FRA-4B<br>FRA-4C           | 5.2-F<br>5.3.2.1-C<br>6.15-A                |
| Franke, Jakob                  | Written      | FRA-1A<br>FRA-1B                     | 4.3.2.2-B<br>5.3.2.1-C                      |
| Fraser, Sarah                  | Written      | FRA-2A<br>FRA-2B                     | 7.10-A<br>7.5-B                             |
| Frey, Wilma E.                 | Written      | FRE-1                                | 5.2-C                                       |
| Friedman, Eva                  | Written      | FRI-1                                | 5.2-D                                       |
| Froehlich, Joan M.             | Written      | FRO-1A                               | 5.2-F                                       |

| Source                     | Comment Type | Letter Code  | Comment and Response Code   |
|----------------------------|--------------|--|---|
|                            |              | FRO-1B   | 5.2-C   |
| Fuchs, Kathleen            | Written      | FUC-1A<br>FUC-1B   | 6.13-B<br>5.3.2.1-C   |
| Fusco, Lawrence            | Spoken       | FUS-1  | 7.19.2-E  |
| Gambino, Mr. & Mrs. Peter  | Written      | GAM-1  | 6.13-B  |
| Ganguly, Jean              | Spoken       | GAN-1A<br>GAN-1B<br>GAN-1C   | 6.2-J<br>4.3.2.2-B<br>7.19.2-C  |
| Garbert, James             | Spoken       | GAR-2  | 5.5*  |
| Gastelu, Dan               | Spoken       | GAS-1A<br>GAS-1B<br>GAS-1C<br>GAS-1D<br>GAS-1E<br>GAS-1F<br>GAS-1G<br>GAS-1H | 7.0-A<br>7.13-B<br>7.16-A<br>6.17-A<br>7.16-A<br>7.19-F<br>7.19.2-D<br>7.16-A |
| Geer, Eugene W.            | Written      | GEE-1  | 5.2-F   |
| Gelinas, Monica            | Written      | GEL-1A<br>GEL-1B   | 5.2-F<br>4.3.2.2-B  |
| Gempler, Susan             | Written      | GEM-1A<br>GEM-1B   | 5.2-A<br>7.0-G  |
| Gill, Linda M. & Dennis L. | Written      | GIL-2A<br>GIL-2B<br>GIL-2C   | 5.2-F<br>7.13.2-C<br>7.15.2-B   |
| Gilrain, Lisa              | Written      | GIL-1  | 5.3.2.1-C   |
| Glaser, Martha             | Written      | GLA-1  | 5.2-F, 5.3.2.1-C  |
| Glass, Bernard & Gloria    | Written      | GLA-2  | 5.2-F   |
| Godbold, Everett           | Spoken       | GOD-1A   | 2.1-E   |
| Gombar, Richard            | Written      | GOM-1A<br>GOM-1B   | 8.3.1-B<br>5.3-G  |
| Gonzalez, Melissa          | Written      | GON-1  | 5.2-B   |
| Goodman, Irma & Sidney     | Written      | GOO-1A<br>GOO-1B   | 4.3.2.2-B<br>7.13.2-C   |
| Gordon, Jean C.            | Written      | GOR-2  | 7.14.2-C  |
| Grabcheski, Alex           | Written      | GRA-1A<br>GRA-1B   | 5.2-A<br>6.3.2-A  |
| Graham, Dolores            | Written      | GRA-2  | 5.2-A   |
| Green, Justin              | Written      | GRE-3A   | 6.10-A  |

| Source                        | Comment Type | Letter Code                          | Comment and Response Code                          |
|-------------------------------|--------------|--------------------------------------|--|
|                               |              | GRE-3B<br>GRE-3C                     | 7.10-A<br>5.3-E                                    |
| Green, William                | Written      | GRE-2A<br>GRE-2B                     | 7.15.2-B<br>7.16.2-B                               |
| Greenberg, Sondra             | Spoken       | GRE-1                                | 7.19.2-C   |
| Greene, Anne                  | Written      | GRE-4                                | 5.2-F  |
| Gubernot, Ronald              | Written      | GUB-1A<br>GUB-1B<br>GUB-1C           | 5.2-F<br>7.0-G<br>7.5-B                            |
| Guedes, Jennifer C.           | Written      | GUE-2                                | 7.2-B  |
| Guerra, Lee S.                | Written      | GUE-1A<br>GUE-1B<br>GUE-1C           | 5.2-F<br>4.3.2.2-B<br>5.3.2.1-C                    |
| Guglielmo, Sabino D.          | Written      | GUG-1A<br>GUG-1B<br>GUG-1C           | 7.13.2-A<br>7.19.2-B<br>7.0-A                      |
| Guida, Patricia D.            | Written      | GUI-1A<br>GUI-1B                     | 7.14.2-E<br>7.19.2-C                               |
| Guilden, Paul                 | Written      | GUI-3                                | 5.2-F  |
| Gulick, Martha                | Written      | GUL-1                                | 7.15.2-B   |
| Gurzo, Joseph                 | Written      | GUR-1                                | 7.13.2-C   |
| Gwinn, Elizabeth              | Written      | GW-1                                 | 5.2-C  |
| Haas, Martin                  | Written      | HAA-1                                | 5.2-F  |
| Haberman, Lillian             | Written      | HAB-1A<br>HAB-1B<br>HAB-1C<br>HAB-1D | 4.3.2-E<br>5.3-E, 5.3.2.3.1-A<br>7.23-B<br>8.3.1-B |
| Halstater, Bruce T. & Lila H. | Written      | HAL-1A<br>HAL-1B                     | 5.2-F<br>6.13-A                                    |
| Hamilton, Betty               | Written      | HAM-3                                | 6.2.3-F  |
| Hamilton, Helen               | Written      | HAM-1                                | 5.2-E  |
| Hatcher, Christi              | Written      | HAT-1                                | 4.3.2.2-B  |
| Hawkins, Gilbert              | Spoken       | HAW-1A<br>HAW-1B<br>HAW-1C<br>HAW-1D | 7.10-A<br>7.2.2-B<br>7.13-B<br>5.2-A               |
| Henderson, Amy                | Written      | HEN-1                                | 7.13.2-C   |
| Hilbert, Lindsay              | Written      | HIL-2A<br>HIL-2B                     | 5.3.2.2-C<br>8.3.1-B                               |

| Source               | Comment Type | Letter Code                                    | Comment and Response Code  |
|----------------------|--------------|--|--|
|                      |              | HIL-2C   | 5.2-A  |
| Hilliard, Patricia   | Written      | HIL-1A<br>HIL-1B<br>HIL-1C                     | 4.3.2.2-B<br>5.3.2.1-C<br>6.1.1-A                                |
| Hinsman, Susan       | Written      | HIN-1A<br>HIN-1B<br>HIN-1C<br>HIN-1D           | 5.2-C<br>5.3.2.1-C<br>7.13.2-C<br>5.3.2.3.3-A                    |
| Hinsman, Susan       | Spoken       | HIN-2  | 5.2-F  |
| Hinsman, Susan       | Written      | HIN-3A<br>HIN-3B                               | 5.3-B<br>6.1.1-A   |
| Hobart, Cynthia      | Written      | HOB-1  | 5.2-B  |
| Hockenbeck, June     | Written      | HOC-1  | 5.2-F  |
| Hoelzel, Thelma      | Written      | HOE-1A<br>HOE-1B<br>HOE-1C                     | 5.5*<br>7.19.2-E<br>7.15.2-G                                     |
| Hoernlein, Carol Ann | Written      | HOE-2  | 5.2-F  |
| Hoff, Jeanette       | Written      | HOF-1  | 5.2-C  |
| Hoffman, Diane       | Spoken       | HOF-2A<br>HOF-2B<br>HOF-2C<br>HOF-2D<br>HOF-2E | 4.3.2.2-B<br>5.3.2.3-A<br>5.3-E, 5.3.2.3.1-A<br>7.2.2-B<br>7.0-A |
| Holmes, J.H.         | Written      | HOL-2  | 5.2-F  |
| Hood, Glenn A.       | Written      | HOO-1A<br>HOO-1B<br>HOO-1C                     | 5.2-F<br>5.2-C<br>7.19.2-B                                       |
| Hopkins, Steve       | Written      | HOP-2  | 5.2-F  |
| Hoppe, Glenda A.     | Written      | HOP-1A<br>HOP-1B                               | 5.2-C<br>5.2-C   |
| Hornyak, Kelley      | Written      | HOR-1  | 7.2-A  |
| Houston, Catherine   | Written      | HOU-1  | 4.3.2.2-B  |
| Howell, Wendy        | Written      | HOW-1  | 5.2-A  |
| Hrbek, Allison M.    | Written      | HRB-1A<br>HRB-1B<br>HRB-1C                     | 4.3.2.2-B<br>6.1.1-A<br>7.15-B                                   |
| Huerta, Chester      | Spoken       | HUE-1  | 7.19.2-E   |
| Hughes, Ed           | Written      | HUG-1  | 4.3.2.2-B  |
| Hughes, Ed           | Spoken       | HUG-2A   | 4.3.2.2-B  |



| Source                  | Comment Type | Letter Code                                    | Comment and Response Code                          |
|-------------------------|--------------|--|--|
|                         |              | HUG-2B   | 6.2.2-B  |
| Hunt, Barry             | Spoken       | HUN-2  | 7.19.2-E   |
| Hunt, Joan M.           | Written      | HUN-1  | 5.2-A  |
| Hurley, Christopher, J. | Written      | HUR-1A<br>HUR-1B<br>HUR-1C                     | 4.3.2.2-B<br>7.0-A<br>5.2-F                        |
| Irizarry, E.            | Written      | IRI-1  | 7.10-A   |
| Jackson, Amanda S.      | Written      | JAC-3  | 5.2-B  |
| Jacob, Kathleen S.      | Written      | JAC-1A<br>JAC-1B<br>JAC-1C<br>JAC-1D<br>JAC-1E | 7.16.2-B<br>7.23-B<br>7.19.2-C<br>7.23-B<br>7.19-E |
| Jacob, Kathleen S.      | Written      | JAC-6A<br>JAC-6B                               | 5.2-F<br>7.23-B                                    |
| Jacobs, Cathleen        | Spoken       | JAC-9A<br>JAC-9B                               | 7.15-B<br>7.16-A                                   |
| Jacobus, Joan           | Written      | JAC-4A<br>JAC-4B<br>JAC-4C                     | 5.2-F<br>4.3.2.2-B<br>5.3.2.1-C                    |
| Jakubik, Matt           | Written      | JAK-1  | 4.3.2.2-B  |
| Janecco, Matthew        | Spoken       | JAN-1  | 4.3.2.2-B  |
| Jarrell, Emily          | Written      | JAR-1  | 8.3.3.1-C  |
| Jensh, Ruth             | Written      | JEN-1  | 7.5-B  |
| Johnson, Margaret       | Written      | JOH-3  | 5.2-F  |
| Johnson, Mary T.        | Written      | JOH-1  | 5.3.2.1-C  |
| Johnson, Omeil          | Spoken       | JOH-5  | 7.19.2-E   |
| Johnson, Robert         | Spoken       | JOH-4A<br>JOH-4B                               | 5.2-A<br>2.3-A                                     |
| Johnson, Robert W.      | Written      | JOH-2A<br>JOH-2B                               | 5.2-F<br>7.2-A                                     |
| Joshi, A.J.             | Spoken       | JOS-1  | 6.15-A   |
| Junguzza, Dennis        | Spoken       | JUN-1A<br>JUN-1B                               | 7.19.2-E<br>2.1-E                                  |
| Kaiser, Nita            | Written      | KAI-1  | 7.19-F   |
| Kaplan, Stuart          | Written      | KAP-1  | 4.3.2.2-B  |
| Karunakaran, Rajan      | Written      | KAR-1A<br>KAR-1B                               | 5.3.2.3-A<br>5.0-C                                 |
| Kasparian, Anna         | Written      | KAS-2  | 5.2-B  |

| Source                  | Comment Type | Letter Code                                    | Comment and Response Code  |
|-------------------------|--------------|--|--|
| Kaszubski, Elizabeth S. | Written      | KAS-1  | 5.2-A  |
| Keator, Eileen          | Written      | KEA-1A<br>KEA-1B                               | 5.2-F<br>5.2-C   |
| Keller, Irene           | Written      | KEL-1  | 5.2-F  |
| Kennedy, Patricia       | Written      | KEN-1A<br>KEN-1B                               | 7.19.2-B<br>7.0-A  |
| Kenyon, Charles         | Spoken       | KEN-2  | 5.5*   |
| Kibel, Paul             | Written      | KIB-1A<br>KIB-1B<br>KIB-1C<br>KIB-1D<br>KIB-1E | 5.2-A<br>6.4-B, 6.4-C<br>5.2-A<br>6.2-I<br>5.2-C   |
| King, Brian             | Written      | KIN-1A<br>KIN-1B<br>KIN-1C                     | 2.3-A<br>6.1.2-B<br>7.15-B   |
| Kirchner, Jane          | Written      | KIR-1  | 7.0-G  |
| Kirkos, James           | Spoken       | KIR-2A<br>KIR-2B<br>KIR-2C<br>KIR-2D           | 7.19.2-E<br>7.19.2-E<br>7.19.2-E<br>2.1-E  |
| Kissileff, Harry R.     | Written      | KIS-1  | 5.2-C  |
| Kiviat, Erik            | Written      | KIV-1  | 6.0-A, 6.2-B, 6.2-C,<br>6.2.3-A, 6.2.3-G, 6.3.3.2-<br>D, 6.5-A, 6.5-B, 6.4-B,<br>6.5-C, 6.5-D, 6.5-F,<br>6.5.3.2-A, 6.5.3.2-C, 6.6-<br>A, 7.0-C, Appendix: B-<br>A, B-C, B-B, B-D, B-E,<br>B-F, B-G, B-K, F-A, B-<br>C, F-G, F-I, F-J G-A, F-<br>F, F-E, F-D, F-B, F-H, F-<br>K, B-H, B-I, B-J |
| Klein, Adam             | Written      | KLE-5  | 7.15-B   |
| Kleinen, Debra          | Written      | KLE-2A<br>KLE-2B<br>KLE-2C                     | 5.2-F<br>4.3.2.2-B<br>5.3.2.1-C  |
| Kleiner, Cary           | Written      | KLE-1A<br>KLE-1B                               | 7.24-B<br>7.19.2-F   |
| Klueger, Vera           | Written      | KLU-1A   | 5.2-F  |

| Source                      | Comment Type | Letter Code  | Comment and Response Code   |
|-----------------------------|--------------|--|---|
|                             |              | KLU-1B   | 2.3-D   |
| Kocis, James                | Written      | KOC-1A<br>KOC-1B<br>KOC-1C   | 7.3.2.2-A<br>5.3-G, 5.3.2.3.3-A<br>8.2-B  |
| Kohn, Elizabeth             | Spoken       | KOH-1A<br>KOH-1B<br>KOH-1C<br>KOH-1D<br>KOH-1E<br>KOH-1F                               | 9.0-B<br>7.22.1.1-A<br>6.1.1-A<br>4.3.2.2-B<br>7.19-C<br>7.0-G                              |
| Korbett, Jane M.            | Written      | KOR-1  | 5.2-F   |
| Koslow, Kathleen            | Written      | KOS-1A<br>KOS-1B<br>KOS-1C<br>KOS-1D<br>KOS-1E<br>KOS-1F<br>KOS-1G<br>KOS-1H<br>KOS-1I | 5.2-F<br>7.0-G<br>7.2-B<br>4.2.4.3-A<br>7.3.2.2-A<br>7.15.2-B<br>7.16-C<br>7.10-D<br>7.10-A |
| Kossak, Ivan                | Written      | KOS-2A<br>KOS-2B<br>KOS-2C<br>KOS-2D   | 5.2-F<br>7.2-B<br>7.13.2-C<br>7.19.2-F  |
| Kostroun, William           | Written      | KOS-3  | 7.13.2-B  |
| Kramcr, Amelia              | Written      | KRA-4  | 5.2-F   |
| Kramer, Barry               | Written      | KRA-5  | 5.2-A   |
| Kratina, Jerilyn            | Written      | KRA-1A<br>KRA-1B   | 5.2-F<br>7.10-A   |
| Kraus, Louis M.             | Written      | KRA-3A<br>KRA-3B<br>KRA-3C<br>KRA-3D   | 4.3.2.2-B<br>7.19.2-F<br>7.15.2-B<br>7.10-A   |
| Krementz, Anne              | Written      | KRE-1  | 5.2-F   |
| Kreuder Jr., Victor         | Spoken       | KRE-2  | 7.19.2-E  |
| Kronyak, Mr. & Mrs. Bernard | Written      | KRO-1A<br>KRO-1B   | 4.3.2.2-B<br>7.15.2-B   |
| Kruglinski, Connie          | Written      | KRU-1  | 7.2.2-B   |
| Kukle, Peter                | Spoken       | KUK-1A   | 7.15-B  |

| Source                | Comment Type | Letter Code                          | Comment and Response Code                |
|-----------------------|--------------|--------------------------------------|--|
|                       |              | KUK-1B                               | 4.3.2.2-B                                |
| Kurz, Josephine       | Written      | KUR-1                                | 6.13-B                                   |
| Kusmich, George       | Written      | KUS-1A<br>KUS-1B<br>KUS-1C           | 5.2-A<br>7.16.2-B<br>4.3.2.2-B           |
| Kwoczka, Bogdau       | Spoken       | KWO-1                                | 7.19.2-E                                 |
| La Rocca, Kyle        | Spoken       | LAR-3                                | 7.19.2-E                                 |
| La Spina, Ross        | Written      | LAS-1                                | 7.13.2-A                                 |
| LaBarbera, Lisa       | Written      | LAB-1A<br>LAB-1B<br>LAB-1C           | 7.0-G<br>7.15.2-B<br>7.13.2-C            |
| Laborim, Vinnie       | Spoken       | LAB-2A<br>LAB-2B<br>LAB-2C<br>LAB-2D | 7.13.2-A<br>7.15.2-B<br>7.14-D<br>7.24-E |
| Lach, Robert          | Spoken       | LAC-1A<br>LAC-1B<br>LAC-1C           | 9.0-B<br>4.3.2-B<br>6.0-B                |
| Lahiff, Dennis P.     | Written      | LAH-1A<br>LAH-1B                     | 8.3.2*<br>7.2.2-A                        |
| Lamarche, Virginia A. | Written      | LAM-1                                | 5.2-F                                    |
| Lamberton, Pam        | Spoken       | LAM-2                                | 5.2-F                                    |
| Lamboy, L.            | Written      | LAM-3                                | 7.19.2-B                                 |
| Lana, Charles         | Written      | LAN-4                                | 5.2-F                                    |
| Lane, Lillian         | Written      | LAN-7                                | 4.3.2.2-B                                |
| Lang, Hope A.         | Written      | LAN-2                                | 5.2-F                                    |
| Lang, Melita & Frank  | Written      | LAN-1                                | 5.2-C                                    |
| Lansbury, Kate        | Written      | LAN-3A<br>LAN-3B<br>LAN-3C           | 6.1.2-A<br>9.0-B<br>5.3.2.1-C            |
| Lanzetti, Patricia    | Written      | LAN-6                                | 7.13.2-B                                 |
| Largman, Rich         | Written      | LAR-1A<br>LAR-1B                     | 5.2-F<br>7.2-B                           |
| Larotonda, Albert     | Written      | LAR-2A<br>LAR-2B                     | 4.3.2.2-B<br>8.2-C                       |
| Laudicina, Kathleen   | Written      | LAU-1A<br>LAU-1B                     | 7.19-F<br>2.0-K                          |
| Lavitol, Michael      | Written      | LAV-1A<br>LAV-1B                     | 5.3-G, 5.3.2.3.3-A<br>4.2.4.3-B          |

| Source  | Comment Type | Letter Code                                    | Comment and Response Code                                      |
|---|--------------|--|--|
| Legiec, Thomas  | Spoken       | LEG-2  | 7.19.2-E   |
| Leich, Donald   | Written      | LEI-1  | 7.15.2-B   |
| Lenge, Lorraine & Joseph                              | Written      | LEN-1A<br>LEN-1B                               | 7.15.2-B<br>7.13.2-B   |
| Leon, Carlos  | Spoken       | LEO-1A<br>LEO-1B                               | 5.5*<br>7.19.2-E   |
| Lesiczka, Jackie                                      | Written      | LES-2  | 5.2-F  |
| Lesko, Joe & Rebecca                                  | Written      | LES-1A<br>LES-1B<br>LES-1C                     | 5.2-B<br>6.2-I<br>5.2-C  |
| Levine, Doug  | Spoken       | LEV-2A<br>LEV-2B<br>LEV-2C                     | 6.15-A<br>7.19.2-C<br>7.0-A                                    |
| Levine, Jo Ann  | Written      | LEV-1  | 5.2-A  |
| Lewis, Mary C.  | Written      | LEW-1  | 5.2-F  |
| Liano, Greg (Manasquan)                               | Written      | LIA-3  | 7.2-A  |
| Liano, Greg (Keyport)                                 | Written      | LIA-2  | 5.2-F  |
| Lifset, Robert  | Written      | LIF-1A<br>LIF-1B                               | 7.0-A<br>7.10-A  |
| Lima, Alexandre                                       | Spoken       | LIM-1A<br>LIM-1B                               | 7.19.2-E<br>6.0-B  |
| Lindauer, Margo                                       | Spoken       | LIN-2A<br>LIN-2B                               | 5.3.2.3-A<br>4.3.2.2-B   |
| Lindemann, Louise & Warren                            | Written      | LIN-1  | 5.2-F  |
| Lisa, Paul  | Written      | LIS-1A<br>LIS-1B                               | 5.2-F<br>7.19.2-D  |
| Liszewski, Brian                                      | Spoken       | LIS-2A<br>LIS-2B<br>LIS-2C<br>LIS-2D<br>LIS-2E | 6.0-B<br>7.19-D<br>7.13-B<br>6.1.1-A<br>5.3.2.3-A, 5.3.2.3.1-A |
| Lo Pinto, Richard W. (Fairleigh Dickinson University) | Written      | LOP-3  | 8.3.3.1-D  |
| Lohman, Sally A.                                      | Written      | LOH-1  | 4.3.2.2-B  |
| Lopez, Jose   | Spoken       | LOP-2  | 7.19.2-E   |
| Losurto, M. and Angela                                | Written      | LOS-1  | 4.3.2.2-B  |
| Lowenstein, Eric                                      | Spoken       | LOW-2  | 7.19.2-E   |
| Lowenstein, Eric                                      | Spoken       | LOW-5  | 7.19.2-E   |
| Lowenstein, Paul                                      | Spoken       | LOW-1A   | 6.15-A   |

| Source                            | Comment Type | Letter Code | Comment and Response Code |
|-----------------------------------|--------------|-------------|---------------------------|
|                                   |              | LOW-1B      | 7.19.2-E                  |
|                                   |              | LOW-1C      | 6.23-N                    |
|                                   |              | LOW-1D      | 7.19.2-E                  |
|                                   |              | LOW-1E      | 5.5-A                     |
| Lowenstein, Paul                  | Spoken       | LOW-3A      | 6.2.3-N                   |
|                                   |              | LOW-3B      | 7.19.2-E                  |
| Lowenstein, Rick                  | Spoken       | LOW-4A      | 7.19.2-E                  |
|                                   |              | LOW-4B      | 6.2.3-N                   |
|                                   |              | LOW-4C      | 5.5-A                     |
| Ludviksen, Kenneth                | Written      | LUD-1A      | 5.2-F                     |
|                                   |              | LUD-1B      | 7.19-F                    |
| Luhrman, Eleanore                 | Written      | LUH-1       | 7.13.2-B                  |
| Lusto, Geraldine B.               | Written      | LUS-1       | 5.2-C                     |
| Lyons-Fairbanks, Janet            | Written      | LYO-1       | 8.3.3.1-C                 |
| Mac Knight, Brett                 | Spoken       | MAC-6       | 5.5*                      |
| MacDonald, Jennifer               | Written      | MAC-1       | 7.0-A                     |
| MacDonnell, JoAnn                 | Written      | MAC-2A      | 5.2-A                     |
|                                   |              | MAC-2B      | 6.5-I                     |
| Mace, Kevin                       | Spoken       | MAC-5A      | 7.19.2-E                  |
|                                   |              | MAC-5B      | 7.2.2-B                   |
| Machlin, Marilyn                  | Written      | MAC-3       | 5.2-C                     |
| Maisch, Joan                      | Written      | MAI-1       | 5.2-F                     |
| Makala, Norma, Eugene & Stephanie | Written      | MAK-1       | 5.3-G, 5.3.2.3.3-A        |
| Malcolm, Terry G.                 | Spoken       | MAL-1A      | 6.2.3-H                   |
|                                   |              | MAL-1B      | 6.5.3-B                   |
|                                   |              | MAL-1C      | 7.15.2-B                  |
| Malin, Mrs. Thaw                  | Written      | MAL-2       | 5.2-F                     |
| Mallett, Mrs. Javier              | Written      | MAL-3A      | 5.2-F                     |
|                                   |              | MAI-3B      | 5.3.2.1-C                 |
| Mancini, Thomas                   | Written      | MAN-1A      | 5.2-F                     |
|                                   |              | MAN-1B      | 5.2-F                     |
| Manskopf, Gisbert                 | Spoken       | MAN-4A      | 5.2-F                     |
|                                   |              | MAN-4B      | 2.0-A                     |
|                                   |              | MAN-4C      | 7.0-G                     |
|                                   |              | MAN-4D      | 4.3.2.2-B                 |
|                                   |              | MAN-4E      | 7.15-B                    |
|                                   |              | MAN-4F      | 6.0-B                     |
|                                   |              | MAN-4G      | 7.16.2-B                  |
|                                   |              | MAN-4H      | 7.18-A                    |

| Source                     | Comment Type | Letter Code                                    | Comment and Response Code  |
|----------------------------|--------------|--|--|
|                            |              | MAN-4I<br>MAN-4J<br>MAN-4K                     | 7.10-A<br>7.5-A<br>7.19-C  |
| Marano, Susan              | Written      | MAR-6  | 7.0-G  |
| Marek, Kevin               | Written      | MAR-4A<br>MAR-4B                               | 7.2-B<br>5.2-C   |
| Maricic, Robert            | Written      | MAR-3A<br>MAR-3B                               | 5.2-F<br>5.2-C   |
| Markley, Marjorie          | Written      | MAR-2A<br>MAR-2B<br>MAR-2C<br>MAR-2D           | 5.2-F<br>7.0-A<br>7.21-A<br>7.15.2-B                                   |
| Marousek, Hilary           | Written      | MAR-7  | 5.2-B  |
| Marrella, Lorenzo          | Written      | MAR-1A<br>MAR-1B<br>MAR-1C                     | 7.0-A<br>8.3.1-B<br>7.0-G  |
| Martini, Anthony T.        | Spoken       | MAR-14A  | 7.19.2-E   |
| Martucci, Ronald & MaryAnn | Written      | MAR-5A<br>MAR-5B                               | 5.2-F<br>5.2-F   |
| Mausner, Marvin            | Spoken       | MAU-2A<br>MAU-2B<br>MAU-2C                     | 7.0-J<br>7.0-G<br>5.2-E  |
| Mausner, Marvin            | Written      | MAU-1A<br>MAU-1B                               | 7.0-I<br>5.5*  |
| Mayer, Joan B.             | Written      | MAY-1  | 7.0-A  |
| Mazza, Marie               | Written      | MAZ-1A<br>MAZ-1B                               | 4.3.2.2-B<br>5.2-B   |
| McAllen, Karon             | Written      | MCA-1A<br>MCA-1B                               | 5.2-C<br>7.15.2-F  |
| McClelland, Jean           | Written      | MCC-3  | 5.2-F  |
| McClelland, William        | Written      | MCC-4A<br>MCC-4B<br>MCC-4C<br>MCC-4D           | 5.2-A<br>5.2-C<br>7.16.2-B<br>7.13.2-C                                 |
| McClure, Stephanie A.      | Written      | MCC-1A<br>MCC-1B<br>MCC-1C<br>MCC-1D<br>MCC-1E | 5.2-F, 8.3.1-B<br>6.4-C<br>7.15.2-B, 7.16.2-B<br>4.3.2.2-B<br>7.15.2-B |

| Source                                 | Comment Type | Letter Code                          | Comment and Response Code              |
|--|--------------|--------------------------------------|--|
| McCormick, James                       | Written      | MCC-2                                | 5.2-F                                  |
| McDonald, Mindy                        | Spoken       | MCD-1                                | 7.10-A                                 |
| McGreen, Joel                          | Written      | MCG-1                                | 5.2-A                                  |
| McHugh, Melissa & Matthew              | Written      | MCH-1                                | 4.3.2.2-B                              |
| McIntosh, Debra                        | Written      | MCI-1A<br>MCI-1B                     | 5.2-F<br>7.0-A                         |
| McLean, W.                             | Written      | MCL-1A<br>MCL-1B<br>MCL-1C<br>MCL-1D | 5.2-F<br>7.14.2-A<br>7.16.2-B<br>5.2-C |
| McNamara, Joan                         | Written      | MCN-1A<br>MCN-1B<br>MCN-1C           | 5.2-F<br>4.3.2.2-B<br>7.5.2-B          |
| Mearon, Marian                         | Spoken       | MEA-1A<br>MEA-1B<br>MEA-1C           | 7.13.2-B<br>6.15-A<br>7.16-A           |
| Meneses, Pauline                       | Written      | MEN-1A<br>MEN-1B                     | 5.2-F<br>4.3.2.2-B                     |
| Mennitt, Irene King                    | Written      | MEN-2                                | 5.2-F                                  |
| Mennitt, Irene King                    | Written      | MEN-3A<br>MEN-3B                     | 5.2-F<br>7.16.2-B                      |
| Mesisco, Rose Marie, Joseph & Rose-Ann | Written      | MES-1A<br>MES-1B                     | 5.2-F<br>7.0-G                         |
| Meyer, H. Gregory                      | Written      | MEY-2A<br>MEY-2B<br>MEY-2C           | 5.2-F<br>6.2.3-M<br>5.3.2.1-C          |
| Meyer, Robert                          | Written      | MEY-1                                | 7.10-B                                 |
| Mezzina, Joe & Barbara                 | Written      | MEZ-1                                | 7.15.2-B                               |
| Middleton, Timothy                     | Spoken       | MID-1                                | 5.5*                                   |
| Mikolay, A.R.                          | Written      | MIK-1A<br>MIK-1B                     | 7.10-B<br>7.19.2-B                     |
| Miller, Craig                          | Written      | MIL-5                                | 5.2-F                                  |
| Miller, Marjorie B.                    | Written      | MIL-1A<br>MIL-1B                     | 5.2-B<br>7.14.2-E                      |
| Mills, Richard                         | Spoken       | MIL-4A<br>MIL-4B<br>MIL-4C           | 4.3.2.2-B<br>6.3.2-A<br>5.2-F          |
| Minck, Genevieve                       | Written      | MIN-2                                | 5.2-B                                  |
| Minnick, John                          | Written      | MIN-1A                               | 7.23-C                                 |



| Source                    | Comment Type | Letter Code                | Comment and Response Code          |
|---------------------------|--------------|----------------------------|------------------------------------|
|                           |              | MIN-1B<br>MIN-1C           | 4.3.2.2-B<br>7.19.2-D              |
| Mitrani, Barbara          | Written      | MIT-1A<br>MIT-1B<br>MIT-1C | 5.2-E<br>5.3.2.1-C<br>4.3.2-C      |
| Mizimakoski, Blagoia      | Spoken       | MIZ-1A<br>MIZ-1B           | 7.19.2-E<br>7.2.2-A                |
| Mohn, Jim                 | Spoken       | MOH-1                      | 5.2-F                              |
| Monnett, Michele          | Written      | MON-2A<br>MON-2B           | 7.2-A<br>7.13.2-B                  |
| Morrow, Trish             | Written      | MOR-1                      | 5.2-B                              |
| Mosca, Nancy & A.         | Written      | MOS-2                      | 5.2-A                              |
| Moser, Elizabeth          | Spoken       | MOS-1A<br>MOS-1B           | 7.0-G<br>5.2-F                     |
| Moser, Elizabeth          | Written      | MOS-4A<br>MOS-4B           | 5.2-C<br>5.2-C                     |
| Moy, Nanci                | Written      | MOY-1A<br>MOY-1B<br>MOY-1C | 7.8-A<br>5.3.2.1-C<br>5.2-C        |
| Murphy, James             | Written      | MUR-2                      | 7.14-J                             |
| Murphy, Susan J.          | Written      | MUR-4A<br>MUR-4B           | 5.2-F<br>5.3.2.1-C                 |
| Murray, Timothy           | Spoken       | MUR-5A<br>MUR-5B           | 6.2.3-N<br>5.2-F                   |
| Murren, Bernard           | Written      | MUR-1                      | 5.2-B                              |
| Musser, Louise            | Written      | MUS-1A<br>MUS-1B           | 5.2-F<br>7.2.2.1-A                 |
| Myers, Garry N.           | Written      | MYE-2                      | 4.3.2.2-B                          |
| Nazy, Nuha                | Written      | NAZ-1A<br>NAZ-1B<br>NAZ-1C | 7.3.2.2-A<br>7.13.2-A<br>4.3.2.2-B |
| Negado, Chris             | Written      | NEG-1                      | 5.2-F                              |
| Nelson, Andrew & Lillian  | Written      | NEL-2                      | 5.2-B                              |
| Nelson, Thelma            | Written      | NEL-1A<br>NEL-1B           | 5.2-B<br>6.2-I                     |
| Neustadter, Ruth & Stefan | Written      | NEU-1A<br>NEU-1B           | 4.3.2.2-B<br>6.2.3-L               |
| Novosielski, Colleen      | Written      | NOV-1A<br>NOV-1B           | 5.2-B<br>5.3.2.1-C                 |

| Source                      | Comment Type | Letter Code                                    | Comment and Response Code                               |
|-----------------------------|--------------|--|---|
| Nutt, Robert & Mary Jo      | Written      | NUT-1  | 5.2-F   |
| O'Connor, Frances & R.L.    | Written      | OCO-1  | 5.2-F   |
| O'Hara, Mercer              | Spoken       | OHA-1  | 5.2-A   |
| O'Neill, Ida C.             | Written      | ONE-1A<br>ONE-1B                               | 5.2-F<br>4.3.2.2-B                                      |
| Olstein, Alex               | Written      | OLS-1  | 5.2-F   |
| Ould, John                  | Written      | OUL-1  | 7.10-B  |
| Packer, Dave                | Written      | PAC-1A<br>PAC-1B<br>PAC-1C<br>PAC-1D<br>PAC-1E | 5.2-F<br>4.3-G<br>7.15-B<br>5.3.2.1-C<br>8.1-N, 8.3.1-A |
| Pantaleo, Judith            | Written      | PAN-2  | 7.2.2-B   |
| Paolini, Elsie              | Written      | PAO-1  | 5.2-F   |
| Pappas, Anthony             | Written      | PAP-1  | 4.3.2.2-B   |
| Paren, Lynne A.             | Written      | PAR-3  | 7.13.2-B  |
| Paris, Noel                 | Written      | PAR-2  | 6.2-M   |
| Parkinson, N.               | Written      | PAR-4  | 5.2-B   |
| Parton, Chris               | Written      | PAR-1  | 4.3.2.2-B   |
| Passaro, Patricia & Charles | Written      | PAS-1  | 5.2-F   |
| Pearson, Anne               | Written      | PEA-1  | 7.10-A  |
| Pell, Lewis                 | Written      | PEL-1  | 5.2-B   |
| Pera, James & Lorraine      | Written      | PER-3  | 6.1.1-B   |
| Perez, Catherine Rodgers    | Written      | PER-1A<br>PER-1B<br>PER-1C                     | 5.2-C<br>7.13.2-C<br>7.19.2-B                           |
| Perrone Jr., Michael        | Written      | PER-2A<br>PER-2B<br>PER-2C<br>PER-2D           | 5.2-F<br>6.15-A<br>7.13-A<br>7.19-C                     |
| Pettisrew, Jack             | Spoken       | PET-1  | 7.13-B  |
| Pfund, Mrs. Ledyard H.      | Written      | PFU-1A<br>PFU-1B<br>PFU-1C                     | 4.3.2.2-B<br>7.21-A<br>7.2.2-B                          |
| Philpot, Euthene            | Spoken       | PHI-3A<br>PHI-3B                               | 5.5-A<br>6.0-B  |
| Pilsbury, Marguerite        | Written      | PIL-1  | 5.2-B   |
| Pinneo, Guy & Janet         | Written      | PIN-1A<br>PIN-2B                               | 5.3.2.1-C<br>6.2-M                                      |

| Source   | Comment Type | Letter Code                          | Comment and Response Code                    |
|--|--------------|--------------------------------------|--|
| Piper, William H.  | Written      | PIP-1                                | 5.2-F  |
| Plambeck, Lynne  | Written      | PLA-1A<br>PLA-1B                     | 5.2-A<br>6.0-B                               |
| Poccia, Peter A.   | Written      | POC-1A<br>POC-1B                     | 5.2-F<br>5.3.2.1-C                           |
| Podsiad, Sophia  | Written      | POD-1A<br>POD-1B                     | 5.2-F<br>6.15-A                              |
| Poling, Joyce  | Written      | POL-1A<br>POL-1B                     | 5.5*<br>7.0-A                                |
| Popa, Connie   | Written      | POP-1A<br>POP-1B<br>POP-1C<br>POP-1D | 4.3.2.2-B<br>7.13-A<br>7.15.2-B<br>5.3.2.1-C |
| Poppe, Suzanne   | Written      | POP-2A<br>POP-2B<br>POP-2C           | 6.0-B<br>7.0-A<br>7.0-G                      |
| Portamora, Rinee   | Written      | POR-2A<br>POR-2B                     | 5.2-F<br>6.0-B                               |
| Powers, Diane  | Written      | POW-1                                | 7.15-B                                       |
| Protomastro, David   | Spoken       | PRO-2                                | 7.19.2-E                                     |
| Protomastro, Nicholas P.   | Written      | PRO-3                                | 5.2-F  |
| Purcell, Eileen, Robert & Molly  | Written      | PUR-2                                | 5.2-F  |
| Purdy, Christina   | Written      | PUR-1                                | 5.2-B  |
| Quartarolo, Michael  | Spoken       | QUA-1                                | 7.19.2-E                                     |
| Quinzer, Matthew G.  | Written      | QUI-1                                | 7.13.2-B                                     |
| Rabinowtiz, R.D.   | Written      | RAB-1A<br>RAB-1B                     | 4.3.2-E<br>7.10-A                            |
| Radzinski, William   | Spoken       | RAD-2A<br>RAD-2B                     | 7.19.2-E<br>5.5*                             |
| Ramsay, Winton   | Spoken       | RAM-1                                | 7.13-B                                       |
| Rancick, John  | Spoken       | RAN-3A<br>RAN-3B                     | 5.2-F<br>6.13-B                              |
| Rankin, Jean   | Written      | RAN-1                                | 5.2-A  |
| Rattigan, Mary T. (Congregation of the Sisters of St. Joseph of Peace) | Written      | RAT-2A<br>RAT-2B<br>RAT-2C           | 5.2-F<br>6.13-A<br>7.14.2-E                  |
| Ravit, Beth  | Spoken       | RAV-2A<br>RAV-2B<br>RAV-2C           | 7.19.2-E<br>6.18-A<br>5.3.2.3-A              |

| Source                     | Comment Type        | Letter Code  | Comment and Response Code  |
|----------------------------|---------------------|--|--|
| Ravit, Beth                | Spoken              | RAV-1A<br>RAV-1B<br>RAV-1C<br>RAV-1D<br>RAV-1E<br>RAV-1F<br>RAV-1G | 6.2.3-C<br>6.2.3-L<br>6.2.3.5-E<br>6.2-I<br>5.2-F<br>7.19.2-C<br>5.2-B |
| Reed, Steve                | Written             | REE-1  | 5.2-F  |
| Reigle, Danielle           | Written             | REI-1A<br>REI-1B<br>REI-1C   | 5.5*<br>7.2.2-A<br>7.2.2-A   |
| Reynolds, Suzanne L.       | Written             | REY-2A<br>REY-2B   | 5.2-A<br>4.3.2-C   |
| Rice, Jason                | Spoken              | RIC-3  | 7.19.2-E   |
| Richardson, Janet Davis    | Written             | RIC-1A<br>RIC-1B<br>RIC-1C   | 5.2-F<br>7.5.2-A<br>5.2-D  |
| Richardson, Kate           | Written             | RIC-2  | 5.2-A  |
| Rigney, J.C.               | Written             | RIG-1A<br>RIG-1B<br>RIG-1C   | 5.2-F<br>6.1.1-A<br>7.15-B   |
| Rivera, Ali                | Spoken              | RIV-3  | 7.19.2-E   |
| Rivera, Cheryl             | Written &<br>Spoken | RIV-2A<br>RIV-2B   | 7.0-I<br>5.5*  |
| Rivera, Nicholas           | Written             | RIV-1  | 2.1-D  |
| Robinson, Sander D.        | Written             | ROB-1  | 5.3.2.1-C  |
| Robischon, Paulette        | Written             | ROB-2A<br>ROB-2B<br>ROB-2C   | 7.0-A<br>7.2-A<br>7.0-G  |
| Robischon, Paulette        | Written             | ROB-4  | 7.21.1.1-A   |
| Roche, Nathan              | Written             | ROC-1A<br>ROC-1B   | 6.5.3-A<br>7.10-B  |
| Rodgers, Anne C.           | Written             | ROD-1  | 5.2-F  |
| Rogan, Michael J.          | Written             | ROG-1  | 4.3.2.2-B  |
| Romero, Sheila             | Written             | ROM-1  | 5.2-B  |
| Roraback, Barbara & Robert | Written             | ROR-1A<br>ROR-1B   | 5.2-B<br>7.2-A   |
| Roraback, Robin            | Written             | ROR-2A<br>ROR-2B   | 4.3.2.2-B<br>8.3.3.1-C   |

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|---|--------------|--|---|
|   |              | ROR-2C<br>ROR-2D   | 6.2.3-J<br>5.3-C  |
| Rosenblatt, Murray & Enid                             | Written      | ROS-4  | 5.2-F   |
| Ross, Barbara T.                                      | Written      | ROS-1A<br>ROS-1B   | 5.2-C<br>5.3.2.1-C  |
| Rostan, Kim E.  | Written      | ROS-2A<br>ROS-2B   | 7.15.2-B<br>7.13.2-B  |
| Rovito, Richard                                       | Spoken       | ROV-1  | 5.5*  |
| Royston, Virginia                                     | Written      | ROY-1  | 5.2-F   |
| Ruenta Jr., Anthony                                   | Spoken       | RUE-1  | 7.19.2-E  |
| Ruscigno, Michael                                     | Written      | RUS-1  | 5.2-F   |
| Rzeczkowski, Stanley                                  | Spoken       | RZE-1A<br>RZE-1B<br>RZE-1C<br>RZE-1D<br>RZE-1E<br>RZE-1F<br>RZE-1G | 6.0-B<br>7.14.2-D<br>7.0-J<br>7.19.2-E<br>7.2.2-A<br>6.15-A<br>7.19.2-E |
| Sachar, Barbara                                       | Spoken       | SAC-1A<br>SAC-1B<br>SAC-1C<br>SAC-1D                               | 5.2-F<br>4.3.2.2-B<br>7.13.2-D<br>5.3.2.1-C                             |
| Sagato, Christopher                                   | Written      | SAG-2A<br>SAG-2B<br>SAG-2C   | 6.2-M<br>7.15.2-B<br>7.13.2-C   |
| Salvati, Nancy E.                                     | Written      | SAL-1A<br>SAL-1B   | 5.2-A<br>5.2-B  |
| Salwen, Julie   | Written      | SAL-2A<br>SAL-2B<br>SAL-2C   | 5.2-F<br>6.2-I<br>6.4-D   |
| Samuel, Laura   | Written      | SAM-1A<br>SAM-1B<br>SAM-1C   | 4.3.2.2-B<br>7.10-A<br>5.2-A  |
| Sanderson, Paul                                       | Written      | SAN-1A<br>SAN-1B   | 7.3.2.2-A<br>5.2-C  |
| Santora, Rev. Alexander M. (Kean Catholic University) | Written      | SAN-4A<br>SAN-4B   | 4.3.2.2-B<br>4.3.2.2-B  |
| Santoro Jr., John                                     | Spoken       | SAN-3  | 5.5*  |
| Sanzari, Joseph                                       | Spoken       | SAN-2A   | 6.2.3-N   |

| Source                        | Comment Type | Letter Code                | Comment and Response Code        |
|-------------------------------|--------------|----------------------------|----------------------------------|
|                               |              | SAN-2B<br>SAN-2C<br>SAN-2D | 7.0-J<br>6.13-B<br>7.2.2-A       |
| Saporito, Dolores             | Written      | SAP-1                      | 4.3.2.2-B                        |
| Savino, Kathleen              | Spoken       | SAV-1                      | 7.3.2.2-G                        |
| Seahill, Francis M. & Mary A. | Written      | SCA-2A<br>SCA-2B           | 5.2-B<br>7.14.2-E                |
| Scalato, Salvatore            | Written      | SCA-3                      | 7.13.2-C                         |
| Scardino, Anthony             | Spoken       | SCA-1A<br>SCA-1B           | 7.19.2-E<br>2.1-E                |
| Scherer, Paul                 | Spoken       | SCH-15                     | 5.5*                             |
| Scherer, Paul R.              | Written      | SCH-2                      | 5.5*                             |
| Schmidt, Bruce                | Written      | SCH-6A<br>SCH-6B           | 7.10-A<br>7.21-E                 |
| Schmidt, F. George & A.       | Written      | SCH-1A<br>SCH-1B           | 4.3.2.2-B<br>7.15.2-B, 8.3.3.1-C |
| Schmidt, Mr. & Mrs. Alfred    | Written      | SCH-4                      | 4.3.2.2-B                        |
| Schulz, Helen                 | Written      | SCH-5                      | 7.0-G                            |
| Schvejda, Dennis              | Spoken       | SCH-14                     | 5.2-F                            |
| Schwartz, Bernice             | Written      | SCH-3A<br>SCH-3B           | 4.3.2.2-B<br>5.2-A               |
| Schwarzkopf, Mrs. Donald S.   | Written      | SCH-13A<br>SCH-13B         | 5.2-F<br>2.3-A                   |
| Scott, J.C.                   | Written      | SCO-1A<br>SCO-1B<br>SCO-1C | 5.2-F<br>7.3.2.2-A<br>5.3.2.1-C  |
| Segari, Joseph                | Spoken       | SEG-1A<br>SEG-1B           | 2.1-E<br>7.2.2-A                 |
| Seiler, Kathleen              | Written      | SEI-1                      | 6.2-M                            |
| Selender, Michael             | Spoken       | SEL-1A<br>SEL-1B<br>SEL-1C | 7.2-B<br>5.2-F<br>5.3.2.3-A      |
| Serrano, George & Eleanor     | Written      | SER-1                      | 4.3.2.2-B                        |
| Shaffer, Donald E.            | Written      | SHA-4                      | See Form 15                      |
| Shaffer, S.L.                 | Written      | SHA-2                      | See Form 15                      |
| Sharpe, Margaret & Ray        | Written      | SHA-3                      | See Form 15                      |
| Shaw, Matthew T.              | Written      | SHA-1A<br>SHA-1B<br>SHA-1C | 5.2-F<br>7.15.2-F<br>5.3.2.1-C   |

| Source                   | Comment Type | Letter Code  | Comment and Response Code   |
|--------------------------|--------------|--|---|
| Shea, Barbara            | Spoken       | SHE-3A<br>SHE-3B<br>SHE-3C<br>SHE-3D<br>SHE-3E<br>SHE-3F<br>SHE-3G<br>SHE-3H<br>SHE-3I<br>SHE-3J | 6.1.1-A<br>7.0-A<br>4.3.2.2-B<br>4.3.2.2-B<br>6.13.3-A<br>7.5-A<br>4.3.2-E<br>6.10-A<br>5.3.2.3-A<br>7.16-A |
| Shelly, Jeffrey          | Spoken       | SHE-4A<br>SHE-4B   | 5.3.2.3-A<br>4.3.2.2-B  |
| Shelly, Jodi             | Spoken       | SHE-2A<br>SHE-2B<br>SHE-2C<br>SHE-2D   | 5.2-F<br>4.3.2.2-B<br>7.19.2-C<br>6.2.3-N   |
| Sheppard, Jacob          | Written      | SHE-6A<br>SHE-6B   | 6.0-B<br>5.2-F  |
| Sheridan, Chris          | Spoken       | SHE-5  | 5.5-A   |
| Shoiket, Henry           | Spoken       | SHO-2  | 4.3.2.2-B   |
| Shoiket, Mary            | Spoken       | SHO-1  | 5.5*  |
| Siegrist, Antoinette     | Written      | SIE-2  | 5.2-A   |
| Silver, Beatrice & Meyer | Written      | SIL-1  | 4.3.2-C   |
| Simpson, Barbara         | Written      | SIM-1A<br>SIM-1B   | 5.3.2.1-C<br>7.24-E   |
| Sinclair, Brian          | Written      | SIN-2  | 7.14.2-A  |
| Singer, Daisy            | Written      | SIN-1A<br>SIN-1B   | 5.2-B<br>5.2-C  |
| Smith, Edna              | Written      | SMI-2  | 7.13.2-B  |
| Smith, Michael J.        | Spoken       | SMI-4A<br>SMI-4B   | 5.5-A<br>7.2.2-A  |
| Smith, Rosa              | Written      | SMI-1  | 5.2-B   |
| Smolin, Audrey           | Written      | SMO-1A<br>SMO-1B<br>SMO-1C   | 7.10-B<br>7.15.2-B<br>7.16.2-B  |
| Snell, Tom               | Written      | SNE-1  | 7.19.2-D  |
| Sobolewski, Bernie       | Spoken       | SBO-1A<br>SBO-1B<br>SBO-1C   | 7.19.2-E<br>5.2-B<br>7.13.2-C   |

| Source                | Comment Type | Letter Code  | Comment and Response Code   |
|-----------------------|--------------|--|---|
|                       |              | SBO-1D<br>SBO-1E<br>SBO-1F<br>SBO-1G   | 7.13.2-B<br>7.15.2-B<br>7.16.2-B<br>5.2-C   |
| Sobolewski, Geneveive | Written      | SBO-2  | 7.10-A  |
| Sodosky, Pearl        | Written      | SOD-1A<br>SOD-1B   | 7.0-G<br>4.3.2.2-B  |
| Sola, Alexandra       | Spoken       | SOL-2A<br>SOL-2B<br>SOL-2C<br>SOL-2D   | 7.19.2-B<br>5.3.2.3-A<br>7.13-A<br>4.3.2-E  |
| Sol-Church, Jack      | Written      | SOL-1  | 5.3.2.1-C   |
| Soreneci, John        | Spoken       | SOR-2  | 5.5*  |
| Sorensen, Lori        | Written      | SOR-1  | 5.2-B   |
| Staehle, Cynthia      | Written      | STA-1A<br>STA-1B<br>STA-1C   | 4.3.2.2-B<br>7.10-A<br>5.3.2.1-C  |
| Stauble, George       | Spoken       | STA-5  | 7.16-A  |
| Stauble, George J.    | Written      | STA-3A<br>STA-3B<br>STA-3C<br>STA-3D<br>STA-3E<br>STA-3F<br>STA-3G<br>STA-3H<br>STA-3I | 2.0-A<br>7.13.2-C<br>6.13-B<br>7.13.2-B<br>7.15.2-B<br>7.19.2-B<br>5.3.2.1-C<br>6.16-A<br>5.2-A |
| Steimle, Emily        | Written      | STE-2A<br>STE-2B   | 5.3.2.1-C<br>5.2-A  |
| Stelta, Chris         | Spoken       | STE-8  | 5.5-A   |
| Stewart, John         | Written      | STE-3  | 5.3.2.1-C, 5.3-B  |
| Stewart, Phyllis A.   | Written      | STE-4  | 6.0-B   |
| Stone, Lane           | Written      | STO-1  | 5.2-C   |
| Stracey, Christine M. | Written      | STR-5  | 5.2-F   |
| Strauch, Jim          | Written      | STR-2  | 7.10-G  |
| Strehl, Gene          | Written      | STR-1A<br>STR-1B   | 5.2-F<br>7.0-G  |
| Stromsmoe, Kent M.    | Written      | STR-4  | 5.3.2.1-C   |
| Stuart, Douglas M.    | Written      | STU-1A   | 5.2-F   |



| Source                      | Comment Type | Letter Code  | Comment and Response Code                                  |
|-----------------------------|--------------|--|--|
|                             |              | STU-1B   | 7.10-A   |
| Sturm, Martha A.            | Written      | STU-2  | 4.3.2.2-B  |
| Sullivan, Matthew           | Spoken       | SUL-3  | 5.5*   |
| Sullivan, Philip            | Written      | SUL-1  | 5.2-B  |
| Sullivan, Robert            | Written      | SUL-2  | 7.15.2-B   |
| Sumner, Miriam & William T. | Written      | SUM-1  | 5.2-F  |
| Swatand, Thomas Y.          | Written      | SWA-1  | 6.1.1-A  |
| Tanner, Mark & Susan        | Written      | TAN-1A<br>TAN-1B<br>TAN-1C                               | 4.3.2.2-B<br>7.15.2-F<br>5.2-D                             |
| Tener, Beth                 | Written      | TEN-1A<br>TEN-1B   | 5.3.2.1-C<br>7.10-A  |
| Termini, Robert             | Written      | TER-1  | 7.15.2-B   |
| Thomas, John                | Written      | THO-2  | 6.2.2-A  |
| Thomason, Betsy             | Written      | THO-1  | 4.3.2.2-B  |
| Thompson, Terrell           | Spoken       | THO-4A<br>THO-4B<br>THO-4C<br>THO-4D<br>THO-4E           | 7.19-C<br>6.15-A<br>7.19.2-D<br>7.15-B<br>7.13-A           |
| Tidong, Joan                | Spoken       | TID-1A<br>TID-1B   | 7.16-A<br>5.2-A  |
| Tilley, Robert              | Written      | TIL-1  | 5.2-A  |
| Tomaszewski, Alfred         | Written      | TOM-1A<br>TOM-1B<br>TOM-1C<br>TOM-1D<br>TOM-1E<br>TOM-1F | 4.3.2.2-B<br>7.0-G<br>7.0-G<br>7.14.2-A<br>7.23-B<br>7.7-A |
| Tomlinson, Jaime            | Written      | TOM-2  | 4.3.2.2-B  |
| Torino, Don                 | Written      | TOR-1  | 5.2-C  |
| Torres, Robert              | Spoken       | TOR-3A<br>TOR-3B   | 5.5-A<br>7.19.2-E  |
| Torretagle, Mary            | Written      | TOR-2A<br>TOR-2B<br>TOR-2C                               | 4.3.2-E<br>7.19.2-B<br>7.19.2-C                            |
| Treinor, Meredith           | Spoken       | TRE-1A<br>TRE-1B<br>TRE-1C                               | 5.2-F<br>7.2.2-B<br>8.3.3.1-C                              |

| Source                  | Comment Type | Letter Code                | Comment and Response Code     |
|-------------------------|--------------|----------------------------|-------------------------------|
|                         |              | TRE-1D<br>TRE-1E<br>TRE-1F | 7.0-G<br>7.19.2-B<br>5.2-F    |
| Triantos, David         | Written      | TRI-1                      | 5.2-A                         |
| Trisolini, Rosemary     | Written      | TRI-2                      | 5.2-F                         |
| Troczyński, Andrew      | Spoken       | TRO-1A<br>TRO-1B           | 6.2.3-N<br>5.5*               |
| Tucker, Kenneth D.      | Written      | TUC-1                      | 7.10-A                        |
| Turner, Joan & Gilbert  | Written      | TUR-1                      | 5.2-F                         |
| Turner, Louisa          | Written      | TUR-2                      | 7.10-A                        |
| Tuscano, Jamie          | Spoken       | TUS-1A<br>TUS-1B<br>TUS-1C | 5.5*<br>6.2.3-N<br>7.19.2-E   |
| Ugarte, Max             | Written      | UGA-1A<br>UGA-1B<br>UGA-1C | 6.2.3-J<br>4.3.2.2-B<br>5.2-B |
| Ugarte, Nilda           | Written      | UGA-2A<br>UGA-2B<br>UGA-2C | 6.2.3-J<br>4.3.2.2-B<br>5.2-B |
| Valera, Carole          | Written      | VAL-1                      | 4.3.2.2-B                     |
| Van Dongen, John        | Spoken       | VAN-5                      | 2.1-E                         |
| Van Dusen, Carola       | Written      | VAN-6A<br>VAN-6B           | 5.2-F<br>4.3.2.2-B            |
| Van Dyke, Christine     | Spoken       | VAN-1A<br>VAN-1B           | 5.2-B<br>5.2D                 |
| Van H., J. (Old Tappan) | Written      | VAN-7                      | 5.2-F                         |
| Van Langen, Gladys M.   | Written      | VAN-4A<br>VAN-4B           | 5.2-F<br>5.2-C                |
| Vargas, Eric            | Spoken       | VAR-1                      | 7.19.2-E                      |
| Verdi, Barbara          | Written      | VER-2                      | 6.13-B                        |
| Vernick, V. E.          | Written      | VER-1                      | 5.2-F                         |
| Vice, Daniel R.         | Written      | VIC-1A<br>VIC-1B           | 7.10-A<br>4.3.2.2-B           |
| Von Till, Mark          | Written      | VON-1                      | 5.2-F                         |
| Voorhoeve, Niels        | Written      | VOO-1                      | 4.3.2.2-B                     |
| Waggoner, Lillian       | Written      | WAG-2A                     | 7.13-B                        |
| Wagner, Karen           | Written      | WAG-1A<br>WAG-1B<br>WAG-1C | 5.2-F<br>6.2.3-M<br>4.3.2.2-B |

| Source                       | Comment Type | Letter Code  | Comment and Response Code                            |
|------------------------------|--------------|--|--|
| Walden, Donald C.            | Written      | WAL-2A<br>WAL-2B   | 5.2-F<br>7.0-G                                       |
| Walker, Sally                | Written      | WAL-4A<br>WAL-4B<br>WAL-4C                               | 7.21-E<br>5.3.2.1-C<br>7.0-C                         |
| Wallsh, Julie                | Spoken       | WAL-5A<br>WAL-5B<br>WAL-5C                               | 7.15-B<br>5.2-B<br>6.2-K                             |
| Walsh, Ann                   | Written      | WAL-3A<br>WAL-3B<br>WAL-3C                               | 5.2-F<br>7.21-C<br>5.2-C                             |
| Walsh, Mary B.               | Written      | WAL-1A<br>WAL-1B   | 7.0-A<br>5.3-G, 5.3.2.3.3-A                          |
| Walter, Jeffrey              | Spoken       | WAL-6  | 7.19.2-E   |
| Ward, Karen & Christopher A. | Written      | WAR-1  | 4.3.2.2-B  |
| Wasko, Michael               | Written      | WAS-3A<br>WAS-3B<br>WAS-3C<br>WAS-3D<br>WAS-3E<br>WAS-3F | 7.21-E<br>5.2-C<br>7.21-A<br>7.0-A<br>2.0-I<br>5.2-C |
| Wasmuth, David               | Written      | WAS-2A<br>WAS-2B   | 5.2-F<br>5.3.2.1-C                                   |
| Wassenar, Sara               | Written      | WAS-4  | 5.2-F  |
| Webber, Helen P.             | Written      | WEB-2  | 5.2-B  |
| Weber, George                | Written      | WEB-1  | 5.2-C  |
| Weber, Zorina                | Spoken       | WEB-5  | 5.3.2.3-A  |
| Weidner, Patricia Ann        | Written      | WEI-5A<br>WEI-5B<br>WEI-5C<br>WEI-5D                     | 5.2-F<br>5.3.2.1-C<br>7.13.2-B<br>7.15.2-B           |
| Weiman Jr., Rick             | Written      | WEI-8A<br>WEI-8B<br>WEI-8C                               | 5.2-A<br>8.3.3.1-C<br>5.2-C                          |
| Weinberg, Jerome & Marjorie  | Written      | WEI-7  | 5.2-B  |
| Weingartner, Jason W.        | Written      | WEI-2  | 4.3.2-E  |
| Weinstein, Richard           | Spoken       | WEI-1  | 5.2-B  |
| Weinstein, Richard M.        | Written      | WEI-3A<br>WEI-3B   | 5.2-A<br>5.2-E                                       |

| Source  | Comment Type | Letter Code  | Comment and Response Code   |
|---|--------------|--|---|
|   |              | WEI-3C   | 6.2-I   |
| Weis, Judith S. (Rutgers, the State University of New Jersey)       | Written      | WEI-11A<br>WEI-11B<br>WEI-11C<br>WEI-11D                           | 6.2.3-H, 6.2.3-I<br>6.2.3-F, 6.2.3-H<br>8.0-J<br>6.2.3-H                                  |
| Weis, Peddrick (University of Medicine and Dentistry of New Jersey) | Written      | WEI-4A<br>WEI-4B<br>WEI-4C   | 6.0-B<br>5.3.2.1-C<br>4.3.2.2-B   |
| Weissman, Alice & Sam   | Written      | WEI-9  | 5.2-A   |
| Wende, John   | Spoken       | WEN-1A<br>WEN-1B   | 6.2.3-N<br>7.19.2-B   |
| Westervelt, John K.   | Spoken       | WES-1  | 7.19.2-E  |
| Wetterhahn, Dawn  | Written      | WET-1  | 4.3.2.2-B   |
| Whitby, Richard   | Written      | WHI-2  | 7.15.2-F  |
| White III, Ken  | Spoken       | WHI-6  | 7.19.2-E  |
| Whitney, Rob  | Written      | WHI-3A<br>WHI-3B   | 7.0-A<br>2.1-E  |
| Whitsell, Susan   | Spoken       | WHI-5A<br>WHI-5B   | 4.3.2.2-B<br>6.10-A   |
| Whitsell, Susan   | Written      | WHI-1A<br>WHI-1B   | 4.3.2.2-B<br>7.2.2-B  |
| Wilczynski, Diana, Joanne & Mark                                    | Written      | WIL-1A<br>WIL-1B<br>WIL-1C<br>WIL-1D                               | 5.2-F<br>7.10-A<br>5.3.2.1-C<br>5.2-C   |
| Wilde, Richard  | Written      | WIL-3A<br>WIL-3B   | 5.2-F<br>5.2-C  |
| Wilson, Charles   | Written      | WIL-2  | 7.10-B  |
| Windham, Lisa   | Spoken       | WIN-1A<br>WIN-1B<br>WIN-1C<br>WIN-1D<br>WIN-1E<br>WIN-1F<br>WIN-1G | 6.2-J, 6.2.3-H<br>6.5.3-A<br>6.2-G, 6.2.3-H<br>6.2.3-O<br>8.3.3.1-C<br>7.5.2-A<br>8.3.1-B |
| Windham, Lisa (Lehigh University)                                   | Written      | WIN-3A<br>WIN-3B<br>WIN-3C<br>WIN-3D                               | 7.2-A<br>6.2-I<br>6.2.2.1-A<br>6.2.3.2-A  |

| Source          | Comment Type | Letter Code | Comment and Response Code |
|-----------------|--------------|-------------|---------------------------|
|                 |              | WIN-3E      | 6.2.3.5-C                 |
|                 |              | WIN-3F      | 6.2.3.2-B                 |
|                 |              | WIN-3G      | 6.2.3.2-C                 |
|                 |              | WIN-3H      | 6.2.3.2-B                 |
|                 |              | WIN-3I      | 6.2.3.2-B                 |
|                 |              | WIN-3J      | 6.2.3.3-C                 |
|                 |              | WIN-3K      | 6.3.3.2-A                 |
|                 |              | WIN-3L      | 6.1.3.2-A                 |
|                 |              | WIN-3M      | 6.3.3.4-A                 |
|                 |              | WIN-3N      | 6.3.3.2-B, 6.3.3.2-C      |
|                 |              | WIN-3Q      | 6.5.3.2-D                 |
|                 |              | WIN-3T      | 6.8-B                     |
|                 |              | WIN-3U      | 6.5.3.2-C                 |
|                 |              | WIN-3V      | 6.8-B                     |
|                 |              | WIN-3X      | 6.3.3.2-A                 |
|                 |              | WIN-3Y      | 6.0-B                     |
|                 |              | WIN-3Z      | 6.5.2-B                   |
|                 |              | WIN-3BB     | 6.2.3-N                   |
|                 |              | WIN-3CC     | 6.2-G, 6.2-J, 6.5.2-B     |
|                 |              | WIN-3DD     | 7.2.2.2.3-L, 7.2.2.2.3-K  |
|                 |              | WIN-3EE     | 8.3.3.1-C                 |
|                 |              | WIN-3FF     | 7.2.2.2-A, 7.2.2.2-B      |
|                 |              | WIN-3GG     | 7.2.2.1.3-A               |
|                 |              | WIN-3HH     | 7.2.2.2.4-D, 7.2.2.2.4-C  |
|                 |              | WIN-3II     | 7.2.2.2.3-J, 7.2.2.2.3-G  |
|                 |              | WIN-3JJ     | 8.1-M, 8.2-C              |
|                 |              | WIN-3KK     | 8.1-L, 8.3.2-D            |
|                 |              | WIN-3LL     | 8.3.2-C                   |
|                 |              | WIN-3MM     | 8.3.3-A                   |
|                 |              | WIN-3NN     | 7.5.2.3.3-B, 7.5.2.3.3-A  |
|                 |              | WIN-3OO     | 8.3-A, 8.3.3.1-A          |
|                 |              | WIN-3PP     | 5.2-E                     |
|                 |              | WIN-3QQ     | 8.2-C                     |
|                 |              | WIN-3RR     | 8.3.1-A                   |
| Winship, George | Written      | WIN-2A      | 7.21-E                    |
|                 |              | WIN-2B      | 5.3.2.1-C                 |
|                 |              | WIN-2C      | 7.0-C                     |
| Woods, Nancy S. | Written      | WOO-1A      | 4.3.2.2-B                 |
|                 |              | WOO-1B      | 7.15-B                    |

| Source                | Comment Type | Letter Code  | Comment and Response Code   |
|-----------------------|--------------|--|---|
| Workman, John         | Written      | WOR-1A<br>WOR-1B<br>WOR-1C   | 5.2-F<br>7.0-C<br>5.2-F   |
| Wright, Helen V.      | Written      | WRI-3  | 7.18-B  |
| Wright, Timothy       | Written      | WRI-4A<br>WRI-4B<br>WRI-4C   | 5.2-F<br>7.2-B<br>5.2-C   |
| Wright, William       | Spoken       | WRI-5A<br>WRI-5B<br>WRI-5C<br>WRI-5D<br>WRI-5E   | 7.14-D<br>7.14-H<br>7.19.2-A<br>7.14.2-A<br>5.3.2.3-A, 5.3.2.3.1-A  |
| Wright, William       | Spoken       | WRI-6  | 7.15-B  |
| Wright, William       | Written      | WRI-2A<br>WRI-2B<br>WRI-2C<br>WRI-2D   | 7.14-H<br>7.0-G<br>7.14-H<br>5.3.2.1-C  |
| Yudelson, Larry       | Written      | YUD-1  | 4.3.2.2-B   |
| Zappala, Salvatore    | Written      | ZAP-1  | 7.5-B   |
| Zawacki, Jeff         | Spoken       | ZAW-1  | 5.5-A   |
| Zedler, Joy B.        | Written      | ZED-1A<br>ZED-1B<br>ZED-1C<br>ZED-1D<br>ZED-1E<br>ZED-1F<br>ZED-1G<br>ZED-1H<br>ZED-1I<br>ZED-1J<br>ZED-1K<br>ZED-1L | 8.2-C<br>7.2.2-B<br>7.2.2.1.3-B, 7.2.2.1.3-A<br>7.2.2.1.3-H, 7.2.2.2.3-G<br>7.2.2.2.3-G, 7.2.2.2.3-I<br>7.2.2.2.3-E, 7.2.2.2.3-D<br>7.2.2.2.3-F, 7.2.2.2.3-D<br>8.1-K, 8.3.3.1-D<br>8.1-I, 8.2-C<br>8.2-F<br>8.2-L<br>8.2-C |
| Zelcer, Brock         | Spoken       | ZEL-1  | 7.0-A   |
| Ziemba, Nancy         | Written      | ZIE-1  | 5.2-B   |
| Zimmermann, Christine | Written      | ZIM-1  | 5.2-B   |
| Zuckerman, Andrea L.  | Written      | ZUC-1A<br>ZUC-1B<br>ZUC-1C   | 7.10-A<br>6.5-I<br>7.14.2-E   |

| Source              | Comment Type | Letter Code  | Comment and Response Code  |
|---------------------|--------------|--|--|
| <b>Form Letters</b> |              |  |  |
| Form 1              | Written      | FORM-1A<br>FORM-1B<br>FORM-1C<br>FORM-1D<br>FORM-1E<br>FORM-1F                   | 5.2-F<br>6.2.2-A<br>2.3-A<br>5.3-A<br>2.3-B<br>5.2-F                 |
| Form 5              | Written      | FORM-5A  | 5.5*   |
| Form 6              | Written      | FORM-6A  | 5.5*   |
| Form 7              | Written      | FORM-7A<br>FORM-7B   | 5.5*<br>2.1-E  |
| Form 8              | Written      | FORM-8A  | 5.5*   |
| Form 9              | Written      | FORM-9   | 5.5*   |
| Form 10             | Written      | FORM-10A<br>FORM-10B<br>FORM-10C<br>FORM-10D                                     | 5.2-F<br>7.21-E<br>2.1-B<br>5.2-F                                    |
| Form 11             | Written      | FORM-11A<br>FORM-11B<br>FORM-11C   | 5.5*<br>7.19.2-G<br>2.1-E  |
| Form 12             | Written      | FORM-12A<br>FORM-12B<br>FORM-12C   | 2.1-E<br>2.1-D<br>5.5*   |
| Form 13             | Written      | FORM-13A<br>FORM-13B<br>FORM-13C<br>FORM-13D<br>FORM-13E<br>FORM-13F             | 5.2-F<br>7.2.2.1-A<br>5.3-A<br>7.15.2-B<br>2.3-A<br>5.2-A            |
| Form 14             | Written      | FORM-14A<br>FORM-14B<br>FORM-14C<br>FORM-14D<br>FORM-14E<br>FORM-14F<br>FORM-14G | 5.2-F<br>7.2.2-B<br>7.2.2-B<br>6.2-I<br>8.1-B<br>5.3.2.1-C<br>7.14-H |
| Form 15             | Written      | FORM-15  | 5.2-F  |
| Form 16             | Written      | FORM-16A<br>FORM-16B   | 5.2-F<br>7.2.1-B   |

| Source  | Comment Type | Letter Code  | Comment and Response Code   |
|---------|--------------|--|---|
|         |              | FORM-16C<br>FORM-16D   | 2.1-B<br>5.2-F  |
| Form 17 | Written      | FORM-17A<br>FORM-17B<br>FORM-17C<br>FORM-17D<br>FORM-17E<br>FORM-17F<br>FORM-17G | 5.2-F<br>7.2.1-B<br>2.1-B<br>5.2-F<br>7.0-A<br>7.10-B<br>5.3.2.1-C        |
| Form 18 | Written      | FORM-18A<br>FORM-18B<br>FORM-18C   | 4.3.2.2-B<br>6.1.1-A<br>5.2-C   |
| Form 19 | Written      | FORM-19A<br>FORM-19B<br>FORM-19C<br>FORM-19D<br>FORM-19E<br>FORM-19F             | 2.0-G<br>5.3.2-B<br>7.15-D<br>2.3-A<br>5.2-F<br>2.3-A                     |
| Form 20 | Written      | FORM-20A<br>FORM-20B<br>FORM-20C<br>FORM-20D<br>FORM-20E<br>FORM-20F<br>FORM-20G | 5.2-F<br>7.10-A<br>4.3.2.2-B<br>7.16-C<br>7.15-E<br>7.13.2-C<br>7.3.2.2-A |
| Form 21 | Written      | FORM-21A<br>FORM-21B<br>FORM-21C   | 5.2-F<br>2.0-A<br>5.3.2.1-C   |
| Form 22 | Written      | FORM-22  | 5.2-F   |
| Form 23 | Written      | FORM-23A   | 5.5*  |



## 14.4 SUMMARY OF COMMENTS AND USACE COMMENTS BY SECTION

### 14.4.1 Chapter 2 Comments and Responses

**2.0-A COMMENT:** *The DEIS does not adequately evaluate potential environmental impacts that could result from the construction and operation of the project. (NJDEP-1A, NJDEP-1C, ENVCOM-3B, ENVCOM-3C, USEPA-1A, USEPA-1Q, STA-3A, TSTC-II, VRP-5B, NYNJBK-2G, MAN-4B, FORM-21B)*

**2.0-A RESPONSE:** Chapter 7 of the DEIS addressed impacts of construction and operation of the project on wetlands, wildlife, water quality, traffic, air quality, flooding, and several other pertinent environmental issues. Further emphasis was focused on construction and operation activities within the sections of Chapter 7 in the FEIS. Indirect and cumulative impacts from the project are also addressed in Chapter 7.

**2.0-B COMMENT:** *A number of key components are needed to evaluate the potential impacts of the proposed project and its potential alternatives are needed, including a "final" wetlands mitigation plan that fully compensates for the functions and values to be lost as a result of wetlands fill. (NMFS-1A)*

**2.0-B RESPONSE:** The FEIS examines a variety of criteria for off-site alternatives analysis and onsite development alternatives, including building and parking area design configurations and related environmental consequences such as projected wetlands fill and mitigation (see Chapters 5.0 and 7.0). USACE considers this evaluation to be sufficient to evaluate the potential impacts of the proposed project and its alternatives, for purposes of an FEIS.

A "final" mitigation plan, as requested by the commenter, is not required in an FEIS by USACE, as the applicant may be required to incorporate ongoing agency or public concerns into its design as part of the review process.

**2.0-C COMMENT:** *Alternatives B, C and D appear to be consistent with the SAMP notice. (NJDEP-1H)*

**2.0-C RESPONSE:** Comment noted. The FEIS states that Empire Tract Alternatives D and E are consistent with the wetland fill limitations stated in the April 22, 1999 Federal Register notice concerning the SAMP for the Hackensack Meadowlands District. See also Chapter 5.0 of the FEIS.

**2.0-D COMMENT:** *The DEIS does not adequately evaluate the potential impacts to fish and wildlife, aquatic diversity and related environmental concerns. Potential impacts should initially be evaluated independent of the proposed mitigation activities. A mitigation plan should then be developed that fully compensates for these potential*

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*impacts, and that includes an evaluation of the need for long-term management and monitoring. (NJDEP-1T)*

**2.0-D RESPONSE:** Please see responses to individual comments on Chapters 6, 7 and 8 of the DEIS, as well as the revised text of the FEIS addressing these issues. Chapter 8.0 of the FEIS focuses on wetlands mitigation, with the wetlands mitigation plans for both Empire Tract Alternatives D and E presented and evaluated to determine whether they compensate for potential impacts from the development, and determine the need for long-term management and monitoring. The applicant has developed a generic monitoring and maintenance plan for the wetlands mitigation project (see Appendix M in the DEIS), which can be refined during final design of the wetland mitigation plan, if a permit is issued.

**2.0-E COMMENT:** *The application is technically flawed:*

- *The applicant's stormwater management plan masquerades as wetland enhancement.*
- *The application unlawfully conglomerates disparate project components in an attempt to maximize rather than minimize wetlands destruction.*
- *There are numerous easily identifiable upland alternatives. (ENVCOM-3C, ENVCOM-3B)*

**2.0-E RESPONSE:** Regarding the first bullet cited above, please see the responses to Comments 8.1-A, 8.1-B and 8.1-D. Regarding the second bullet, please see responses to the Comments on Chapter 5.0. With respect to the minimization of wetland impacts, Chapter 5.0 of the FEIS presents the redesign efforts undertaken by the applicant to minimize the on-site footprint of the proposed development by consolidating and stacking the project components, while still consistent with the project purpose. This redesign effort has identified two alternatives, Empire Tract Alternatives D and E, that each have a total wetland fill requirement of 134-acres, while the original permit application called for a wetlands footprint of 206-acres (Meadowlands Mills Alternative). Please see responses to the comments on Chapter 5 of the DEIS. Section 5.4.4 of the FEIS also addresses the investigation and evaluation of potential off-site alternatives for the project. No practicable alternative sites were identified that could meet the project purpose or have less environmental consequences. For a further discussion of the updated off-site alternatives analysis, see responses to Comments 5.3-B and 5.3-C.

**2.0-F COMMENT:** *The proposed on-site compensatory mitigation would not compensate for proposed impacts to coastal wetlands. (DOI-2RRR, FWS-3HHH)*

**2.0-F RESPONSE:** Please see the responses to Comments 8.1-J, 8.1-M and 8.1-N, as well as Sections 7.2, Appendix B and Section 8.3 of the FEIS.

**2.0-G COMMENT:** *The project would result in significant degradation of waters critical to this region's ecosystem. (FORM-19A)*

**2.0-G RESPONSE:** USACE assumes the comment refers to degradation of Hackensack River water quality as a consequence of fill placement and stormwater runoff from the proposed development. As indicated in Section 7.3 of the DEIS and FEIS, placement of fill on 134 acres would not be expected to have a significant impact on Hackensack River water quality. This is because the water quality of the river in the vicinity of the site is primarily determined by loadings from Newark Bay as well as discharges from the BCUA wastewater treatment plant located nearby and upstream of the site. The issue regarding loss of water quality improvement functions from the applicant's proposals concerns the regulatory requirement of USACE to ensure that issuance of any permit would result in no net loss of wetland functions (See Section 7.2 of the FEIS). The revised Empire Tract Alternative E wetland mitigation plan proposed by the applicant should offset most impacts to water quality improvement functions of existing wetlands caused by placement of fill on 134 acres of wetlands. USACE has concerns regarding degradation of wetlands within the proposed detention basin, Bashes Creek, and other impacted areas of remaining common reed wetlands, but overall impacts would still not be expected to significantly impact Hackensack River water quality.

**2.0-H COMMENT:** *The project is inconsistent with the goals of the wildlife management plan developed for the Meadowlands. (DOI-2RRR, FWS-3HHH)*

**2.0-H RESPONSE:** The *Wildlife Management Plan for the Hackensack Meadowlands*, dated September 22, 2000, prepared in anticipation of adoption of a SAMP for the Hackensack Meadowlands by the U.S. Fish and Wildlife Service (Coordinating Agency), the U.S. Army Corps of Engineers (New York District), the U.S. Environmental Protection Agency (Region II), the National Marine Fisheries Service and the New Jersey Meadowlands Commission, identifies five goals:

- (1) *Maintenance of viable populations or metapopulations of all native species in situ.*
- (2) *Representation, within protected areas, of all appropriate non-invasive native plant communities across their natural range of regional variation.*
- (3) *Enhancement, restoration, and maintenance of ecosystem integrity, including natural dynamic processes (e.g., successional patterns, disturbance regimes, hydrologic processes, nutrient cycles, predator-prey associations).*
- (4) *Management over time to maintain native plant and animal communities and ecological processes.*

- (5) *Preservation of large tracts of land and restoration of that land to a functioning part of the Meadowlands ecosystem (e.g., removal or replacement of tide gates with structures that close only on extremely high tides to allow normal tidal flow and fish passage). Preservation and restoration of vegetated wetland corridors that connect both small and large tracts are also necessary to connect populations of less mobile species and to increase the value of formerly isolated tracts.*

It is the opinion of USACE that these goals seeking to mitigate for the discharge of 134 acres of fill could largely be addressed by the 271 acres of tidal brackish mitigation. Although USACE has concerns with the design of the present plan (see Section 8.3 of the FEIS) it is an improvement over the plans originally proposed by the applicant under Empire Tract Alternatives D and E. The last goal of “*Preservation of large tracts of land*” would not be met, although the mitigation plan would address the goal of “*restoration of that land to a functioning part of the Meadowlands ecosystem (e.g., removal or replacement of tide gates with structures that close only on extremely high tides to allow normal tidal flow and fish passage)*” on portions of the tract where tidal flow would be restored under the mitigation plan for Empire Tract Alternatives D, E, and Revised E.

**2.0-I COMMENT:** *Such a fill would have massive, adverse and avoidable impacts on critical wetland resources of waters of the United States. (NMFS-1W, HMP-2A, WAS-3E)*

**2.0-I RESPONSE:** Comment noted. The response to comments on Chapters 6.0, 7.0 and 8.0 address individual issues concerning impacts; in addition, Chapter 6.0 of the DEIS and FEIS address the project impacts, while Chapter 8.0 addresses mitigative measures to address those impacts.

**2.0-J COMMENT:** *The proposed project in its current site is also contrary to important federal transportation, air quality, water quality, and brownfields redevelopment policies. (HMP-2B)*

**2.0-J RESPONSE:** In Section 2.3 of the DEIS and FEIS, the applicability of federal and state regulatory programs to the project is discussed.

**2.0-K COMMENT:** *A person should be able to build on their property. (LAU-1B)*

**2.0-K RESPONSE:** USACE recognizes that, property owners have rights concerning building on private property. Property owners, however, must conform to local, county, state and Federal statutes and regulations, including the Clean Water Act, and Section 10 of the Rivers and Harbors Act.

**2.0-L COMMENT:** *The Department of Interior and the U.S. Fish and Wildlife Service conclude that the 212 acre project which would fill at least 206 acres of coastal wetlands, as well as other on-site alternatives described in the DEIS, would result in significant degradation of water of the United States. The U.S. Fish and Wildlife Service also concludes that the proposed on-site compensation mitigation would not compensate for proposed impacts to coastal wetlands. (DOI-2RRR, FWS-3HHH)*

**2.0-L RESPONSE:** As noted in Section 5.5.1.4.2 of the FEIS, USACE has determined that the 212-acre project, called the Meadowlands Mills Alternative, would result in significant detrimental environmental impact and that other on-site alternatives are available that would have less wetland impacts compared to this alternative while still achieving the project purpose. Empire Tract Alternatives D, E, and Revised E were carried forward in the FEIS to further evaluate their environmental consequences and mitigation plans. Under the revised Empire Tract Alternative E, the wetland mitigation plan would provide sufficient tidal brackish wetland acreage to compensate for the proposed discharge of 134 acres of fill into site wetlands, but USACE still has some concerns regarding the design of the current mitigation plan.

**2.0-M COMMENT:** *The DEIS still fails to address adequately several important issues, including project purpose and need, alternatives, and the applicant's failure to comply with parts 230.10 (a),(c) and (d) of the Clean Water Act 404 (b)(1) Guidelines. (NMFS-1W)*

**2.0-M RESPONSE:** The FEIS, Appendices and Responses to Comments document the analyses and steps USACE has taken to comply with parts 230.10 (a) (alternatives analysis), (c) (water quality) and (d) (minimization) of the guidelines.

**2.0-N COMMENT:** *The DEIS and permit application provide an insufficient basis for the granting of a permit. (ENVCOM-3D)*

**2.0-N RESPONSE:** USACE believes that the information submitted to date by the applicant provides a sufficient basis for preparation of the FEIS. In addition, USACE has solicited comments and information from reviewing agencies, advocacy groups and the general public during the course of the EIS process. USACE welcomes comments on the FEIS, which will be incorporated into the permit review process and record of decision (ROD) regarding the applicant's proposal.

## **2.1 Major Conclusions and Findings**

**2.1-A COMMENT:** *The DEIS attempts to justify its portrayal of these estuarine wetlands as degraded by using an inappropriate comparison between the extant wetlands on the Tract and "undisturbed freshwater marshes." This point of reference is*

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*completely inappropriate for two reasons 1) it is unlikely that a small area of high quality habitat could compensate for reduced areas of coastal habitat, especially in urban areas; 2) it ignores the fact that there are very little pristine or "undisturbed" wetlands in the Northeast. (ENVCOM-3P)*

**2.1-A RESPONSE:** The DEIS did not intend to imply that the existing Empire Tract wetlands are degraded, although they are referred to as tidally restricted. USACE is unaware of a comparison between the Empire Tract and "undisturbed freshwater marshes" in the DEIS. The Empire Tract wetlands are tidally restricted by leaking tide gates that result in variable salinity (see also response to Comments 6.2-B, 6.2.3.2-C, 6.3.3.2-B, and 6.2.3.3-C). In describing the available wetland habitat and functions in Section 6.2 and 6.5 of the DEIS, several comparisons were made to other wetlands in the HMD that are not tidally restricted. USACE feels this is a fair and accurate comparison to describe site conditions. On the Empire Tract tidal restriction limits inundation of the site to infrequent events, so that it does not support the same fish and benthic resources as other wetlands in the HMD that are not tidally restricted. As a result, the habitat for other species groups such as waterfowl or wading birds is similarly limited.

In response to the comment that *"it is unlikely that a small area of high quality habitat could compensate for reduced areas of coastal habitat, especially in urban areas"*, Sections 7.2 and 7.5 of the FEIS make it clear that the proposal would impact species groups differently and thus have to be evaluated in the context of regional management priorities. Sections 7.2 and 8.3 address potential landscape level effects of the project (see also responses to comments on Sections 7.2 and 8.3).

In response to the comment that the DEIS *"ignores the fact that there are very little pristine or "undisturbed" wetlands in the Northeast"*, the DEIS and FEIS analyzed project impacts within a regional context. Regional (human influenced) conditions are described in Chapters 6.0 and 7.0 describing existing conditions and impacts. For example, Section 6.2 describes vegetation changes wrought by human influence over several decades, while Section 6.3 describes historical changes in water quality within the region, both of which directly affect habitat quality of the Empire Tract and the region. Tidally restricted wetlands do not offer the same wetland functions as wetlands that are not restricted (see response to Comments 6.2.3-O, 6.2.3.2-A, and Section 6.5 and 7.5 of the DEIS and FEIS).

**2.1-B COMMENT:** *The DEIS contains several serious flaws including a failure to consider alternative, non-wetland sites; an inability to compensate for the loss of the wetlands; and, a failure to consider the cumulative effects of the proposed development. (FORM-10C, FORM-16C, FORM-17C)*

**2.1-B RESPONSE:** Please see responses to Comments on Chapters 5.0 and 8.0. Cumulative impacts of development proposals were considered in Section 7.24 of the DEIS and in the FEIS.

**2.1-C COMMENT:** *Three of the five onsite alternatives (Meadowlands Mills and Alternatives A and B) are clearly not in compliance with the Guidelines, because two other onsite alternatives exist (Alternatives C and D), which are able to meet the basic project purpose while resulting in the loss of significantly less wetlands acreage. (USEPA-1J)*

**2.1-C RESPONSE:** USACE finds in the FEIS that Empire Tract Alternatives D and E provide for a reduction in the acreage of wetlands fill compared to other on-site alternatives, while remaining consistent with the applicant's overall project purpose. (see Chapter 5 in the FEIS). The FEIS also points out that Meadowlands Mills Alternative, as well as Alternatives A, B, and C were not further considered.

**2.1-D COMMENT:** *The entire region will benefit from the project, not just Carlstadt, and the project is a long-term solution for the region. (FORM-12B, CARL-4D, KPC-1, RIV-1)*

**2.1-D RESPONSE:** Comment noted. The FEIS (see Section 7.19 and 7.24 in the FEIS) describes the environmental and socioeconomic benefits of the project to the Borough of Carlstadt and the Hackensack Meadowlands District, as well as adverse impacts and the means proposed by the applicant to mitigate them.

**2.1-E COMMENT:** *The project represents a balanced growth approach with economic opportunity and environmental enhancement. (DEG-1A, NA-2C, SH-2A, SH-1A, BCCTLC-2B, BCCTLC-2E, BCCTLC-2G, BCTC-1A, LECET-1A, LECET-1B, MRCC-3E, NJBCTC-1A, NRCC-1B, BIA-1B, BRA-2B, DAL-5B, GOD-1A, JUN-1B, KIR-2D, SEG-1A, VAN-5 WHI-3B, FORM-7B, FORM-11C, FORM-12A)*

**2.1-E RESPONSE:** Socioeconomic and environmental aspects of the project are discussed in Chapter 7.0.

#### **2.1.4 Environmental Consequences**

**2.1.4-A COMMENT:** *It is not clear whether the DEIS traffic analyses considered the projects included in the SAMP Federal Register Notice or if inclusion of these projects would effect regional and local traffic conditions. (NJDEP-1EE, HMDC-1C)*

**2.1.4-A RESPONSE:** Section 7.15 of the DEIS described future traffic conditions in the area, assuming an accepted background growth level which was considered to include future development. This analysis was subsequently updated as reflected in Section 7.15 of the FEIS, with updated background growth levels, additional projects in the vicinity of

the Empire Tract. The updated analysis reflects the roadway master plan being considered by the NJMC.

## **2.3 Relationship to Environmental Protection Statutes and Other Environmental Requirements**

**2.3-A COMMENT:** *A permit for the development would violate the Clean Water Act; as the act specifically prohibits the Army Corps of Engineers from sanctioning a project that will have a significant adverse impact on the marine environment and presumes that alternatives exist to non-water dependent uses of a wetland. (ENVCOM-3G, ED-1B, ED-1G, HMP-3Q, HMP-4W, NRDC-1A, NJAS-2C, NYNJBK-2J, BEC-3A, JOH-4B, KIN-1A SCH-13B, RPA-2B, FORM-19F, FORM-1C, FORM-13E, FORM-19D)*

**2.3-A RESPONSE:** USACE will make a determination as to whether the applicant's project complies with Section 404 of the Clean Water Act after receipt of comments to the FEIS, at which time a Record of Decision (ROD) on the application will be made.

**2.3-B COMMENT:** *The additional vehicles will be adding to air pollution and exceed limits considered unhealthy under the Clean Air Act. (FORM-1E)*

**2.3-B RESPONSE:** Assuming that mitigation is implemented as planned, the project is not expected to cause or contribute to exceedances of the National and New Jersey Ambient Air Quality Standards, which have been established at levels to protect public health and welfare with an adequate margin of safety (see Section 7.16 of the FEIS).

**2.3-C COMMENT:** *The proposed development conforms with the HMDC zoning, but multiple variances are required for the project. Multiple variances are required from HMDC concerning the elimination of the residential uses and for bulk variances concerning the design of the project. (HMDC-2E, NJDEP-1HH)*

**2.3-C RESPONSE:** As stated in the FEIS, the project conforms to NJMC zoning, provided variances are granted to eliminate the residential and neighborhood retail development uses (see Section 7.21).

**2.3-D COMMENT:** *The project is inconsistent with the Harbor Estuary Program and the Clean Water Act. (KLU-1B, NJCF-1D)*

**2.3-D RESPONSE:** The Empire Tract is included in a list of properties in the New York/New Jersey Harbor Estuary considered desirable for acquisition through the Harbor Estuary Program (HEP). The HEP does not prevent a property owner from developing its property, and it is unlikely that all HEP properties identified will be purchased for preservation. USACE is aware of no funding or specific plans in the foreseeable future



enabling the government or others to purchase the Empire Tract, or a willingness of the current property owner to sell. Please see the response to Comment 2.3-A, regarding project compliance with the Clean Water Act.

## 14.4.2 Chapter 4 Comments and Responses

**4.0-A COMMENT:** *Additional details of the economic and market demand studies should be provided and included in the Appendices, because it is not possible to independently evaluate the relevance of these analyses to the evaluation of project demand/need. (NJDEP-II)*

**4.0-A RESPONSE:** References to the economic and market demand studies, which are on file with USACE, are provided in the DEIS and FEIS. These studies provide details of the information summarized in the EIS.

### 4.2 Project Description

**4.2-A COMMENT:** *In general the DEIS discusses projected consumer "demands" as opposed to the "need" for the project. (NJDEP-II)*

**4.2-A RESPONSE:** As noted in the Corps' regulations at 33 C.F.R. § 320.4(q), the district "will generally assume that appropriate economic evaluations have been completed, the proposal is economically viable, and [it] is needed in the marketplace." The economic and market demand studies carried out for the applicant are referenced in the DEIS and FEIS, and are on file with USACE. These reports provide the details of the information summarized in the DEIS and FEIS, and are available from USACE upon request.

**4.2-B COMMENT:** *A number of transportation projects are directly associated with the project and would need to be implemented to provide adequate access to the site, including the West Shore Commuter Railroad, expansion of Interchange 18W of the New Jersey Turnpike and the connections to Paterson Plank Road and Washington Avenue. (NJDEP-1BB)*

**4.2-B RESPONSE:** Access to the site is considered in the traffic and transportation plan section of the FEIS (see Section 7.14 and 7.15), including the expansion of Interchange 18W along the NJ Turnpike, construction of Route 120A, and other aspects of the NJMC Route 120 Master Plan that the applicant indicates will be constructed coincident with the project. As noted in the Response to Comment in Section 5.5.2.1.4, the FEIS includes an updated Traffic Impact Study (TIS) that addresses the latest Route 120 Master Plan and the revisions to the project transportation plan. As discussed in Response to Comment 4.2-C below, the West Shore Commuter Railroad is not part of this project.

**4.2-C COMMENT:** *The DEIS does not address the potential impacts of the rail line to the project and/or area. The rail line will cut across a proposed mitigation area, thus reducing the value of the area. (NMFS-II, NJT-1B, NJT-1C)*

**4.2-C RESPONSE:** Several rail line planning initiatives are being considered by NJ Transit (see FEIS Section 7.14.1.3.) The West Shore Line is currently in the scoping stage of a DEIS/Major Investment Study. The most recent comments from NJT shows alignment paralleling following the proposed Route 120A roadway, from the Sports Complex towards the Hackensack River. NJ Transit is currently studying this project, which includes consideration of an elevated track that could reduce potential impacts by only requiring fill for the footings of the structure as compared to filling for earthen embankments for rail line support. While the applicant's proposal was designed to be compatible with the construction of the future rail line, such a rail line is not a part of the applicant's proposal. Any proposed rail line would be considered a separate project, subject to its own environmental and permitting review. With regard to potential impacts on the mitigation area, the final alignment of any proposed rail line is unknown at this time.

**4.2-D COMMENT:** *Does the zoning requirements of the Planned Development Center-1 (PDC-1) zone require the five project components?(NMFS-1E, HMDC-2F)*

**4.2-D RESPONSE:** The PDC-1 Zoning designation requires mixed-use development. All five components meet the applicant's stated project purpose, but are not required by the zoning designation. The PDC-1 zone regulation set forth that office, retail, hotel, housing and neighborhood retail development shall be provided as principal uses within the zone, while warehousing and mass transit are permitted uses. Although the development plan may be substantially in compliance with the NJMC District Zoning Regulations (N.J.A.C. 19:4-1.1 *et seq.*), NJMC has stated that its implementation may necessitate a variation for removal of housing and related uses from the PDC-1 zone. Please see Sections 6.20 and 7.21 of the FEIS, and response to comment 2.3-C.

**4.2-E COMMENT:** *With the housing component withdrawn from the project, how does the project meet the requirements of the PDC-1 zone? (HMDC-2F, NMFS-1E)*

**4.2-E RESPONSE:** As relates to residential development, the applicable PDC-1 Zone regulation provides that "no less than 4,500 dwelling units shall be required in PDC-1." See N.J.A.C. 19:4-5.3A(d)3.ii. Initially, the applicant proposed, and the NJMC General Plan Approval for the Project allowed for the construction of 6,200 housing units. The applicant points out that a basis for allowing this housing was that regional needs for low and moderate-priced housing could be addressed through the project. See Decision on the General Plan Application, 171 (Apr. 19, 1993). Since the issuance of the General Plan Approval, however, the NJMC has looked to adopt a new housing policy for the project site. See Need for Growth and Environmental Improvement in the Hackensack Meadowlands District. (Rev. March 6, 2000).

NJMC has advised the applicant that under this new housing policy, only the low and moderate-income housing needs of the Borough of Carlstadt, as opposed to regional needs, must be considered in the designation of housing units for the project. NJMC further advises that the New Jersey Council on Affordable Housing (COAH) has

identified that the Borough has the obligation to provide 251 low and moderate income housing units and that the appropriate development multiple ratio (market-rate to affordable housing) has been designated as 4:1. This results in a total number of all housing units for the project of approximately 1,200 units. With regard to the housing units, an agreement has been entered into with the Borough that would eliminate the need for any housing to be built on the project site in exchange for other contributions to the Borough's COAH requirements. Due to revised NJMC policy, the applicant's agreement with the Borough, and COAH requirements, the applicant believes that NJMC no longer mandates construction of residential units on the Empire Tract. The applicant has asked NJMC for a zoning variance to eliminate the residential requirement of its PDC-1 zoning.

#### **4.2.4.3 Project Phasing**

**4.2.4.3-A COMMENT:** *Would restoration of the 380 acres of wetlands mitigation be completed before the filling of the 206 acres of wetlands?(KOS-1D)*

**4.2.4.3-A RESPONSE:** If a permit were issued, USACE would require that the wetland mitigation plan would proceed prior to or concurrently with the start of construction of the development, including the placement of fill. The entire wetlands mitigation project would be completed as part of the first phase of the project. In the first year of construction of the wetland mitigation project, tidal restoration activities including excavation, regrading and tidal inundation would be completed. Plantings of emergent marsh areas would occur at the end of the first year and beginning of the second year, depending on the actual growing season and planting season. Final grading and additional plantings of the restored wetland, upland islands and buffers would be performed the second year.

**4.2.4.3-B COMMENT:** *How long would the mitigated wetlands be maintained for?(LAV-1B)*

**4.2.4.3-B RESPONSE:** If a permit were issued, USACE would look to monitor the wetland mitigation project for at least a ten-year period. During this period, maintenance activities would be required to ensure the success of the project. The applicant has stated that at the end of a ten-year period, the wetlands will be maintained by an organization (as yet unidentified) that accepts the mitigation area for land preservation.

#### **4.3 Purpose and Need for the Project**

**4.3-A COMMENT:** *The USACE has narrowly defined the project's purpose and need in the DEIS such that the Empire Tract becomes the only site that could meet the definition and does not allow for a comprehensive evaluation of the potential off-site alternatives. (ENVCOM-3H, DOI-2HHH, FWS-3XX, VRP-4E, ENVCOM-3PPP, NYNJBK-2D)*

**4.3-A RESPONSE:** (See response to 5.3-B and 5.3-C and also Section 5.4 of the FEIS). In discussions with the applicant, USACE considered the issue of co-locating the multiple components on a single site. The New York District determined that, in order to be a viable project from the applicant's perspective, the project purpose must be an integrated mixed-use project. USACE Headquarters concurred with this conclusion on September 5, 1997, finding that the project purpose statement was consistent with the guidance provided in prior elevation cases under Section 404(q) of the Clean Water Act.

The applicant has identified co-location and integration of project components as critical to the economic viability of its mixed-use project. To assess alternatives, generic minimum site parameters for a generic super-regional mixed-use commercial development were identified. Taking into account the project purpose, the off-site alternatives analysis reviewed 103 potential off-site alternative sites within the defined six-county area. USACE believes the off-site alternatives analysis to be comprehensive (see FEIS Chapters 4 and 5).

**4.3-B COMMENT:** *The information contained in the DEIS provides no convincing evidence that the various component parts of the proposed project must be constructed at one site or must be a stated size in order to have a viable project. (DOI-2III, FWS-3YY, BCAS-2B)*

**4.3-B RESPONSE:** See response to Comment 4.3-A. The construction of a mixed-use development on the Empire Tract is consistent with the project purpose, as described by USACE on 23 September 1997 (see Section 4.3 of the FEIS). The proposed project is consistent with the project purpose, and with information provided by the applicant as to the economic viability of the proposed project.

With respect to the size of the project, Section 5.4.3 of the FEIS documents the process used to determine the parcel size of the project, and Section 5.5 documents the environmental review process used to develop, evaluate and refine the design and size of the proposed project to minimize the footprint, wetland fill and other environmental impacts. Based on the evaluation of comparable facilities in the region, the general size requirement was established for each component. USACE conservatively selected the lowest value for each component and then combined each of these values to determine that the smallest alternative parcel size for a general mixed-use development to be viable in this region was 132 acres.

**4.3-C COMMENT:** *There is no discussion to justify a conclusion that separating the project into individual components (e.g., hotel, office buildings, warehouse, retail space) would not also be viable. (DOI-2III, FWS-3YY, HMDC-2A)*

**4.3-C RESPONSE:** The DEIS states that the project purpose is a "mixed-use commercial development" with five basic components. See response to Comment 4.3-B.

**4.3-D COMMENT:** *The DEIS does not adequately address the question of apparent independent utility for each project component. Consequently, alternative sites for the individual project components need to be evaluated. (USEPA-1C, MRCC-1E)*

**4.3-D RESPONSE:** The question of independent utility is not the test for evaluation of the project purpose. Independent utility is used to determine whether projects are sufficiently different to justify separate permits or separate NEPA documentation.

**4.3-E COMMENT:** *The requirements of the NJMC special zoning are not sufficient to justify considering only alternatives, which could accommodate all elements of the development. As discussed above, if Mills can obtain a waiver for the residential component, then it can obtain a waiver for the hotel and office uses as well. (ENVCOM-3AAAA, HMP-4Q)*

**4.3-E RESPONSE:** According to the applicant, all five-project components are necessary in order to construct an economically viable mixed-use development project, consistent with the project purpose.

**4.3-F COMMENT:** *No evidence has been provided to demonstrate that these components must all be present, or on the same site. (NMFS-1C)*

**4.3-F RESPONSE:** See responses to Comments 4.3-B and 4.3-E above.

**4.3-G COMMENT:** *USACE should document a determination that none of the components can be modified in scope and that all of the components must be built together. (ENVCOM-3UUU, ENVCOM-3WWW, DOI-2III, FWS-3YY, USEPA-1C, NMFS-1D, ENVCOM-3VVV, ENVCOM-3AAA, DOI-2H, NMFS-1C, PAC-1B)*

**4.3-G RESPONSE:** See response to Comment 4.3-B above.

#### **4.3.2 General Need for the Project**

**4.3.2-A COMMENT:** *The minimum parcel size used for the alternatives analysis is not justified. (USEPA-1C, ENVCOM-3ZZZ, USEPA-1D)*

**4.3.2-A RESPONSE:** Please see response to Comment 4.3-B above.

**4.3.2-B COMMENT:** *The DEIS should provide additional information justifying why the target market is limited to the six county area. (ENVCOM-3J, FWS-2BBB, DOI-2LLL, USEPA-1F)*

**4.3.2-B RESPONSE:** As identified in the Project Purpose statement and as described in the DEIS, the geographic scope for the Empire/Mills project is northeastern New Jersey. USACE has determined that this area encompasses all of Bergen, Union, Passaic, Essex, and Hudson counties, and the portion of Middlesex County north of the Raritan River (an area of approximately 804 square miles) . See responses to Comments 5.3-A and 5.3-B, and Chapters 4 and 5 of this FEIS. This geographic scope has provided an adequate range of potential off-site alternatives for consideration by USACE, consistent with the project purpose.

**4.3.2-C COMMENT:** *The DEIS fails to distinguish between the region's ability to support the project and the region's demand for the project. (See open space initiatives.) The regional needs analysis does not establish that northern New Jersey needs this project. (ENVCOM-3J, ENVCOM-3QQQ, MIT-1C, ARN-1D, SIL-1, REY-2B, CON-3C, ENVCOM-3XXX, NMFS-1F, RAB-1A, HAB-1A, WEI-2, BCAS-1D, ARN-1B, SUR-1, TOR-2A, DIM-1A)*

**4.3.2-C RESPONSE:** Please see response to Comment 4.2-A.

**4.3.2-D COMMENT:** *No explanation has been provided on the methodologies used to calculate this "need", and the Ernst and Young (1998) report cited in the document is not included in the appendices, so the methodology used to conclude that there is a vast unmet need for shopping malls could not be reviewed. (NMFS-1F)*

**4.3.2-D RESPONSE:** The FEIS provides a summary of the demand analysis performed by the applicant, with the details and explanation of the methodology provided in the administrative record. Supporting documentation provided by the applicant has been submitted to USACE and can be provided to any interested parties on request. These include the following:

- GA/Partners, Justification for the Need, Size, and Mix of the Empire MXD, 7 (June 1989)
- Ernst & Young. 1998. Market Analysis Report for Meadowlands Mills.
- Ernst & Young. 2001. Updated Socio-Economic Market Study for the Meadowlands Mixed-Use Development.

**4.3.2-E COMMENT:** *The USACE should consider the needs of the public before granting a permit for filling of wetlands. (ENVCOM-3QQQ LF-6C, LF-6D, LF-9A, CFB-1B, HMPA-1G, HMPA-1I, HRK-1B, LWVBC-2C, LWVBC-2F, NYNJBK-3C, SCNJ-2E, BRU-8B, SHE-3G, SOL-2D)*

**4.3.2-E RESPONSE:** As required by USACE regulations, USACE considers the needs of the public as part of its public interest review. USACE will consider all public and agency comments in conjunction with the analysis of impacts presented in the FEIS in preparing a ROD regarding whether or not to grant a permit for the applicant's proposal.

**4.3.2-F COMMENT:** *No documentation has been provided:*

- *To demonstrate that the retail/entertainment component would be infeasible on its own, with less than 150-200 stores, or more than one floor, or without high ceilings*
- *The use of predicted disposable income as a means of determining the amount of commercial space needed is questionable.*
- *No explanation has been provided on the methodologies used to calculate this need.*
- *The Ernst and Young (1998) report cited in the document is not included in the appendices, so the methodology cannot be reviewed. (ROG-1, NMFS-1F)*

**4.3.2-F RESPONSE:** Regarding the first bulleted item, please see responses to Comments 4.2-D and 4.3-B. Regarding the last three bulleted items, the supporting data and methodologies are presented in the updated 2001 Ernst and Young report, which can be provided upon request.

#### **4.3.2.1 Opportunity for Commercial Sector Growth**

**4.3.2.1-A COMMENT:** *Some of the indicator "demand factors and preferences" cited in support of commercial growth appear to be contradicted by Table 4.3-1 in the DEIS. Additional data is warranted for economic and demographic projections beyond 2002. (NJDEP-1J)*

**4.3.2.1-A RESPONSE:** The applicant prepared an updated study, (Ernst & Young. 2001. Updated Socio-Economic Market Study for the Meadowlands Mixed-Use Development), providing additional data on economic and demographic projections for the six county area. Further information on this is provided in Section 6.18 of the FEIS. Table 4.3-1 has been updated to reflect projected demographic data out to 2005.

#### **4.3.2.2 Market Demand for a Retail/Entertainment Center**

**4.3.2.2-A COMMENT:** *There is no public need for this project because the people of New Jersey do not want more malls and New Jersey already has the second highest density of malls in the nation. (ENVCOM-3SSS, BCAC-3B, NJAS-2M, NYNJBK-2B, SCHC-1F, ALL-4A, AMB-2A, ASH-1B, BOW-1C, BRU-5A)*



**4.3.2.2-A RESPONSE:** As defined in the project purpose statement, the project is a mixed-use commercial development, of which the retail and entertainment component is less than one-half of the overall project's square footage. The applicant's studies show market demand for each of the three major project components in northeastern New Jersey. The Record of Decision (ROD) to be issued after publication of the FEIS must also reflect USACE's consideration of the need for the project from the perspective of the overall public interest (see Section 4.3 of the FEIS).

**4.3.2.2-B COMMENT:** *The area does not need another mall. Additional retail places are not needed. There are plenty of malls and shopping centers in the area. (PFU-1A, KAP-1, COZ-1B, BOL-1B, GOO-1A, FORM-20C, ROG-1, LOS-1, ANT-1, BOH-1C, GEL-1B, BRO-2A, ROR-2A, SCH-1A, BEV-1A, NEU-1A, VRP-1C, POP-1A, SOD-1B, WHI-1A, BHA-1D, CNNJ-1A, BEA-2B, DEL-1B, MCN-1B, UGA-1B, UGA-2B, HOU-1, OSC-1C, MIN-1B, SAN-4A, SAN-4B, CAR-1B, FER-1B, CHA-1A, HIL-1A, GUE-1B, TOM-1A, COR-1B, THO-1, KUS-1C, WAG-1C, KRO-1A, FRA-1A, TAN-1A, BCAS-2D, BAR-2, YUD-1, SHO-2, KLE-2B, CER-1D, SAC-1B, LF-2E, PAR-1, LOH-1, VOO-1, MYE-2, CRO-1A, AFF-1B, NAZ-1C, STA-1A, SAM-1A, CAM-3A, LAR-2A, ALL-1A, VIC-1B, JAK-1, WCNH-1C, JAC-4B, CHA-4A, DAL-2A, CAR-6, CHA-5B, DEL-5B, MEN-1B, ONE-1B, SCH-3A, KRA-3A, MAZ-1A, MCH-1, PAP-1, SCH-4, VAL-1, TOM-2, WOO-1A, HUG-1, ALL-4B, WAR-1, ANG-1, LAN-7, SAP-1, WET-1, FORM-18A, LF-4C, LF-8C, LF-8E, WR-1, BCAS-1C, BCAS-2B, CFB-1D, HMP-3E, HMPA-1E, 4.3.2.2-B, LTA-2A, MALWV-1, SCNJ-1D, SCNJ-2C, CAM-7A, CER-2A, COC-1, CON-8A, CON-7A, DEV-3A, FEL-2, GAN-1B, HAT-1, HOF-2A, HRB-1A, HUG-2A, HUR-1A, JAN-1, KOH-1D, KUK-1B, LAC-1B, LIN-2B, MAN-4D, MCC-1D, MIL-4A, SER-1, SHE-3D, SHE-3C, SHE-3D, SHE-4B, SHE-2B, STU-2, VAN-6B, VAR-1, WAL-6, WHI-5A)*

**4.3.2.2-B RESPONSE:** Comment noted.

**4.3.2.2-C COMMENT:** *On-line sales over the Internet will challenge the dominance of mall-based retail. (ENVCOM-3TTT)*

**4.3.2.2-C RESPONSE:** The proposed project consists of a hotel, office space, retail/entertainment, warehousing and mass-transit. Only a portion of the overall project consists of retail. Recent events indicate that many of the companies relying on Internet sales are suffering from financial difficulties because the internet market has not developed and expanded as predicted. It is expected that most retail sales will continue to be through traditional sources in the foreseeable future.

**4.3.2.2-D COMMENT:** *Projected growth in mall-based retail sales is flawed because*

- *The regional ability to support this project is based on "sources of demand" (number of households and what they spend annually) rather than "indicators of demand" (occupancy rates);*

- *Retail experts predict growth of on-line sales will challenge the dominance of mall-based retail. (ENVCOM-3TTT)*

**4.3.2.2-D RESPONSE:** Please see response to Comments 4.2-A and 4.3.2.2-C. Indicators of demand were considered in the applicant's economic analysis of the region's ability to support the project.

#### **4.3.2.3 Market Demand for Office Uses**

**4.3.2.3-A COMMENT:** *It is not possible to evaluate the actual need for additional office space in the region given the information presented in Table 4.3-5, which appears to conclude that all of the employment growth projected by the State of New Jersey will be in the office sector. (NJDEP-1K)*

**4.3.2.3-A RESPONSE:** Table 4.3-5 (DEIS) has been deleted from the FEIS. Table 4.3-2 in this FEIS presents office space demand through 2003. Please see response to Comment 4.2-A. Details of the analysis of the demand for additional office space are provided in the Ernst and Young market study (2001).

**4.3.2.3-B COMMENT:** *In projecting office needs, Table 4.3-5 then incorrectly assumes that all of this employment growth will be in the office sector. Therefore, it is not possible to evaluate the actual need for additional office space in the region given the information presented in the DEIS. (NJDEP-1K)*

**4.3.2.3-B RESPONSE:** Table 4.3-5 (DEIS) has been deleted from the FEIS. Table 4.3-2 in this FEIS presents office space demand through 2005. Refer to response to Comment 4.2-A. Details of the analysis of the demand for additional office space are provided in the Ernst and Young market study (2001).

#### **4.3.2.4 Market Demand for a Hotel**

**4.3.2.4-A COMMENT:** *The needs analysis should take into account the recently approved hotel projects within the District including a conference center. (NMFS-1G, ENVCOM-3YYY)*

**4.3.2.4-A RESPONSE:** The projections of market demand took into account all hotel projects in the District that were approved at the time of the preparation of the DEIS. The FEIS relied on updated information provided in the Ernst and Young (2001) report (see Section 7.19).

**4.3.2.4-B COMMENT:** *The demand for hotel rooms appears to be based largely on qualitative measures and the opinion of the applicant. (NJDEP-1K)*

**4.3.2.4-B RESPONSE:** The demand for hotel rooms has been analyzed using quantitative data, including historical supply and demand information, as compiled and analyzed by Ernst and Young (2001).

**4.3.2.4-C COMMENT:** *What need is there for two regional conference centers? Again, the methodology for determining the "need" was not included in the DEIS. (NMFS-1G)*

**4.3.2.4-C RESPONSE:** Please see response to Comment 4.2-A.

**4.3.2.4-D COMMENT:** *The quantitative information provided in Table 4.3-7 is based on "demand measure in room nights", and no attempt has been made to covert this parameter into a projection of the actual number of hotel rooms "needed." (NJDEP-1K)*

**4.3.2.4-D RESPONSE:** The analysis of demand for hotel space relies on "room nights", which is consistent with industry practice. In determining the market demand for the hotel, Ernst & Young (2001) assessed the existing hotel inventory and projected new development, identified the remaining unaccommodated room night demand, and determined that there was sufficient unaccommodated demand to support the amount of room nights expected to be generated by a 521-room hotel. The total amount of hotel rooms required can be computed by dividing the projected annual room nights by the number of days in a year and multiplying that figure by the comparable hotels' projected occupancy rate. Although the report continued to be expressed in "room nights," it analyzed whether there was a market demand for the number of rooms proposed by the hotel component.

**4.3.2.5 Demand for Warehouse/Distribution**

**4.3.2.5-A COMMENT:** *No evidence has been provided to demonstrate that other existing warehouse facilities could not provide services to any retail development built or that the warehouse must be on-site. (NMFS-1G)*

**4.3.2.5-A RESPONSE:** The warehouse component of the project is part of the mixed-use nature of the project, as described in the project purpose statement.

### 14.4.3 Chapter 5 Comments and Responses

**5.0-A COMMENT:** *The DEIS has been artificially constrained with respect to minimum parcel size, geographic scope and criteria desired by the applicant. (USEPA-1I, FWS-2H)*

**5.0-A RESPONSE:** With respect to minimum parcel size, USACE evaluated data from comparable facilities within northeastern New Jersey for each of the commercial components and determined a minimum size for a mixed-use development of the type proposed by the applicant. For a more detailed description of this analysis, see response to Comment 4.3-A and the Responses to Comments in Section 5.4.3. With respect to the geographic scope, the off-site alternatives analysis was based upon a six county area consistent with the project purpose statement, which refers to "northeastern New Jersey", and is consistent with the broad geographic region used for off-site alternatives studies for past regional planning efforts, such as the SAMP. The minimum parcel size and geographic scope used in the FEIS resulted in a review of 103 sites as a basis for the off-site alternatives analysis. See FEIS Table 5.4-3 and Appendix C, and response to comment 5.3.2-A.

**5.0-B COMMENT:** *The alternatives analysis provided in the DEIS does not clearly demonstrate that impacts have been avoided and minimized to the maximum extent practicable, or that other sites could be used to accomplish the project purpose and need. (NMFS-1L)*

**5.0-B RESPONSE:** Regarding off-site alternatives analysis, as discussed in FEIS Section 5.4.4.3 and Appendix C, sites within the 804 square mile, six-county area, were analyzed to determine whether there were less environmentally damaging practicable alternatives that met the project purpose.

Section 5.5.1 of the FEIS describes seven on-site configurations for the proposed development that would result in varying amounts of wetland fill. The purpose of the evolving on-site configurations was to reduce the on-site project footprint so as to minimize environmental consequences and in particular impacts associated with the filling of wetlands, while maintaining consistency with the project purpose. As a result of this effort at on-site minimization, USACE eliminated the alternatives with greater wetland or other environmental impacts from further consideration and carried forward for more detailed analysis. Alternatives D and E, are the on-site alternatives that would result in a lower amount of wetland fill and significantly lesser environmental impacts as compared to the other previously considered alternatives. See FEIS Section 5.5.

**5.0-C COMMENT:** *Practicable alternatives were not adequately discussed. (ED-2Q, VPR-4D, DOU-1A, PAN-2, SCNJ-1B, KAR-1B)*

**5.0-C RESPONSE:** Please see the responses to Comments to 5.0-A and 5.0-B, also FEIS Chapter 5.0.

**5.0-D COMMENT:** *Three of the five on-site alternatives (Meadowlands Mills and Alternatives A and B) are clearly not in compliance with Section 404(b)(1) guidelines, because two other on-site alternatives exist (Alternatives C and D) which are able to meet the basic project purpose while resulting in significantly less wetlands acreage. (USEPA-1J)*

**5.0-D RESPONSE:** Please see response to Comment 2.1-C.

## **5.2 No-Action Alternative**

**5.2-A COMMENT:** *USACE should deny the permit. (ENVCOM-3A, DOI-2M, KIB-1A, FORM-13F, KIB-1C, BOW-1A, DAH-1A, SAL-1A, RAN-1, KUS-1A, TRI-1, NJAS-1G, JMCORP-3G, STA-3I, BCAS-2A, KAS-1, ED-2P, PLA-1A, ALS-1A, ALS-1D, HIL-2C, LF-1B, VRP-2D, VRP-4C, STE-2B, GRA-1A, SAM-1C, CAM-3C, CAR-4, HOW-1, RIC-2, DAL-1A, HUN-1, MOS-2, GD-1B, WEI-9, SIE-2, MCG-1, KRA-5, BIE-1, WEI-8A, REY-2A, BOL-1A, GRA-2, CRA-2, CEL-1, CAR-5A, BRU-2, LEV-1, TIL-1, SCH-3B, GEM-1A, DRE-3A, DET-1A, MAC-2A, DRE-2A, WEI-3A, ED-1A, GCA-1A, HRK-1D, HCI-1B, HCII-1B, NYNJBK-3F, AMB-2E, ASH-1A, ENS-2A, HAW-1D, JOH-4A, MCC-4A, OHA-1, TID-1B)*

**5.2-A RESPONSE:** USACE will consider the information presented in the FEIS, and any other relevant information, including public and agencies' comments, in making its determination whether to issue or deny a permit.

**5.2-B COMMENT:** *The Empire Tract should be saved as open space and the wetlands preserved. (ENVCOM-3VV, ROR-1A, PUR-1, UGA-1C, UGA-2C, SAL-1B, WEI-1, MOR-1, HOB-1, NEL-1A, CAM-1A, CRA-1, MUR-1, RAV-1G, VAN-1A, LSPC-1C, SBO-1B, JAC-3, GON-1, ESS-1, AUF-1, MAR-5B, FWS-2A, ZIE-1, ENS-1, BEA-3A, MAR-7, ANE-1, BAS-1A, NOV-1A, FLU-1, COM-1, NEL-2, MIN-2, KAS-2, ZIM-1, WEB-2, WEI-7, SUL-1, SIN-1A, SMI-1, SOR-1, PEL-1, PIL-1, ELS-1A, MIL-1A, SCA-2A, DEL-5A, LES-1A, MAZ-1B, PAR-4, ED-1C, LWVBC-2A, LTA-2B, NRDC-2B, NJAS-2A, NYNJBK-1A, SCHC-1C, SCHC-1D, SCNJ-1E, BEC-3C, BRU-8D, CHU-1, ROM-1, WAL-5B)*

**5.2-B RESPONSE:** Please refer to response to Comments 5.2-A and 6.11-A. This alternative does not meet the applicant's project purpose.

**5.2-C COMMENT:** *The Empire Tract should be made part of a Hackensack Meadowlands National Wildlife Refuge and Park. (ENVCOM-3UU, JC-1, WEB-1, ARY-1C, ARY-1F, KIB-1E, CNNJ-1G, MCCA-1D, AND-1A, KEA-1B, PER-1A, CAP-1C,*

WIL-1D, NJAS-1F, COR-3, FRE-1, LAN-1, KIS-1, EDW-1, TOR-1, STO-1, ED-2E, CHA-3C, CRO-2B, MAR-4B, WEC-1B, MAR-3B, MOY-1C, NYNJHEP-1B, SBO-1G, HOF-1, BAK-1, DEV-1, GWI-1, HIN-1A, MCA-1A, WCNH-1A, ECH-2C, ECH-2E, CHA-4B, FLSP-1A, BOW-2, WIL-3B, BEA-3B, MAC-3, ROS-1A, MCSPCA-1E, DET-2C, ENG-1D, SMLA-1B, LUS-1, FRO-1B, WEI-8C, HOO-1B, MCL-1D, HOP-1B, CAR-5B, CAN-1, VAN-4B, SIN-1B, WRI-4C, WAL-3C, LES-1C, MCC-4B)

**5.2-C RESPONSE:** As described in Chapter 5.0 in the FEIS, no concrete proposals or funding from state or federal agencies have been identified to USACE for such a plan, nor has the private property owner indicated its support for such a plan. Please refer to response to Comment 5.2-A.

**5.2-D COMMENT:** *USACE should select the No-Action Alternative as the preferred alternative to best protect fish and wildlife resources. (DOI-2L, NMFS-1Q, FRI-1, TAN-1C, NYNJHEP-1A, VAN-1B, ECH-2B, LWVNJ-1A, RIC-1C, MCCCCAW-1F)*

**5.2-D RESPONSE:** Please refer to response to Comment 5.2-A. This alternative does not meet the applicant's project purpose.

**5.2-E COMMENT:** *The wetlands on the Empire Tract should be restored as proposed by the Baykeeper's plan. (NMFS-1J, ROR-2D, MIT-1A, CNNJ-1E, DOD-2, WIN-3PP, DRE-1B, WEC-1D, AI32-1A, LSPC-1D, HAM-1, WEI-3B, LWVNJ-1E, CBBCF-1E, NYAG-1A, GD-1C, NRDC-2F, MAU-2C, NYNJBK-2I, WEI-3B)*

**5.2-E RESPONSE:** Please refer to response to Comment 5.2-C.

**5.2-F COMMENT:** *Many commenters expressed their opposition to the development of a mall in the Meadowlands. (ARY-1A, BEN-1, CNNJ-1D, BEA-2A, KEA-1A, MCN-1A, RIC-1A, LIN-1, STR-1A, CAR-1A, MCI-1A, MES-1A, PUR-2, FER-1A, GUE-1A, KRA-1A, CON-1, CAP-1A, WIL-1A, RUS-1, WAG-1A, MUS-1A, MAR-2A, HEC-1D, SAL-2A, COL-1A, ANJEC-1A, WEE-1, GEE-1, MCC-2, HOE-2, LAN-2, HAA-1, ED-2D, KLE-2A, MAN-1A, MAN-1B, CLA-1A, COX-1B, MAR-3A, BNHC-1A, MOH-1, MOS-1B, SAC-1A, RAV-1E, LTA-1A, VRP-4N, KEL-1, JMCORP-4, WCNH-1B, ARN-1A, MAR-5A, CHBCF-1A, JAC-4A, WAL-2A, HAL-1A, FWS-2B, CBBCF-1A, VER-1, WIL-3A, CHA-8, CEN-2, BEC-1, ARC-1, JOH-3, KRE-1, MAI-1, ROY-1, NRPA-1A, MEY-2A, MCSPCA-1A, KLU-1A, BOH-1A, BUC-1A, ENG-1A, GIL-2A, SHA-1A, GEE-1, RAT-2A, VON-1, SMLA-1A, OCO-1, FRO-1A, EGA-1, BRO-3, BAY-1, DEM-1A, STU-1A, HOO-1A, BOR-1A, KOS-1A, KOS-2A, MCL-1A, KRA-4, HOP-1A, HOC-1, GRE-4, DUC-1, ERE-1, DEV-2, CON-2, CLA-4, NEG-1, NUT-1, MCC-3, LAN-4, VAN-4A, TRI-2, TUR-1, SUM-1, PIP-1, REE-1, PAS-1, PAO-1, MEN-1A, ONE-1A, LSEC-1A, MAL-3A, BIJ-1A, JAC-6A, JOH-2A, LIS-1A, LWVBC-1A, MEN-3A, WRI-4A, WAL-3A, BRU-1, CON-3A, GUB-1A, MCC-1A, SCO-1A, WEI-5A, LAR-1A, CRI-1, MAL-2, OLS-1, POC-1A, ROS-4, STR-5, LIA-2, LEW-1, KOR-1, GLA-2, FLA-1, CRU-1, COP-1, BRU-7, BOR-2, BAR-4, BAG-3, ACK-2A,*

*SCH-13A, MUR-4A, WAS-2A, WOR-1A, WOR-1C, ETZ-1B, SAN-1B, TSTC-1A, WAS-3F, WAS-3B, PAC-1A, BRU-6A, FORM-1A, FORM-1F, FORM-10A, FORM-10D, NRPA-1A, NRPA-1C, NRPA-1H, FORM-13A, FORM-14A, FORM-15, FORM-16A, FORM-16D, FORM-17A, FORM-17D, FORM-18C, FORM-19E, FORM-20A, FORM-21A, BRU-7A, WEI-6, LUD-1A, FRA-4A, HUR-1C, VAN-6A, POD-1A, VAN-7, BAB-1, ROD-1, HOL-2, LES-2, CAR-8, MOS-4B, BAR-8, GPCC-1A, GPCC-1B, FORM-22, PRO-3, GUI-3, PER-2A, MEN-2, LAM-1, HOP-2, EST-1, MIL-5, RIG-1A, HMP-4X, SCHC-1H, MUR-5B, NYNJBK-2H, HEC-2G, LF-8A, CON-7B, SCH-14, VRP-5E, SEL-1B, TRE-1A, TRE-1F, CIALF-1E, BCAS-3A, CFB-1A, RPA-1G, CON-9A, CON-10, GCA-1B, SHE-2A, ENS-2B, CAM-6A, MAN-4A, HIN-2, CHE-1B, CHE-1C, BRO-5, RAN-3A, BRU-8A, LAM-2, NJCF-1F, MRCC-3C, NJAS-2E, NJAS-2F, MIL-4C, ED-1E, LWVBC-2H, AVI-1, WAS-4, BIA-1A, POR-2A, SHE-6B, JMCORP-3E, GEL-1A, GCE-1)*

**5.2-F RESPONSE:** The comments in opposition to project for which the permit is sought will be taken into account by USACE in its decision making process, along with comments by proponents of the project.

**5.2-G COMMENT:** *Under the "No Action" Alternative, the ability to require the owners and operators of the tide gates to modify their operation to allow tidal flow may be possible. (NMFS-1J)*

**5.2-G RESPONSE:** There is no documentation that indicates the willingness of the property owners and/or operators of the tidal gates to adopt the commenter's proposal. Under NEPA, this is not considered to be a foreseeable action. Future no-action conditions in the FEIS assume that operation of tide gates will continue as is.

### **5.3 Alternative Sites**

**5.3-A COMMENT:** *The DEIS examination of alternative sites does not consider whether such alternatives might be created by having only one or more components on the site. The components listed in the project purpose should be evaluated independently and/or a rationale provided for the need to compress all components of the project on one contiguous site. (ENVCOM-3CCCC, NMFS-1K, FWS-3III, ENVCOM-3ZZZ, USEPA-1E, ALS-1B, HIN-3A, FORM-1D, FORM-13C, NYNJBK-2C)*

**5.3-A RESPONSE:** Please see response to Comment 4.3-B.

**5.3-B COMMENT:** *The DEIS should consider upland alternatives. (VRP-4F, DOI-2G, STE-3, VRP-4D)*

**5.3-B RESPONSE:** The DEIS considered a range of upland alternatives. In response to comments, USACE requested the applicant to perform an updated analysis of upland alternatives. As requested by USACE, the applicant performed another off-site



alternatives analysis for potential sites as of October 2000. In addition to previous and current sites identified by the applicant's consultant within the six county area, this updated alternatives analysis considered sites in New Jersey suggested by commenters, as well as a number of other undeveloped and brownfield sites (see Section 5.4.4 and Appendix C in this FEIS).

**5.3-C COMMENT:** *The alternatives analysis ignored the substantial redevelopment opportunities that exist in urban areas surrounding the Meadowlands. A June 1995 report by the U.S. General Accounting Office identified 185 sites totaling 2,500 acres of reusable commercial and industrial land in Union and Hudson Counties, New Jersey, alone. (DOI-2MMM, FWS-3CCC)*

**5.3-C RESPONSE:** Please see response to Comment 5.3-B. Urban areas surrounding the Meadowlands were included in the off-site alternatives analysis, which also included over 500 potential brownfields sites. Most of these sites were below the minimum acreage threshold utilized in the off-site alternative analysis performed by the applicant and the acreage threshold established by USACE in Section 5.4.3 of the FEIS. Eight brownfield sites exceeded the minimum acreage threshold, five of which were not already under examination. Data on these brownfields sites and other potential off-site alternatives is presented in Appendix C and was evaluated in Section 5.4.4 of the FEIS.

**5.3-D COMMENT:** *The off-site alternatives analysis is flawed in three major ways:*

1. *The minimum size of alternatives evaluated is too large;*
2. *The geographic area considered for alternatives is much too narrow;*
3. *The existing use of alternative sites was too narrowly defined, precluding an evaluation of reusable commercial and industrial land.*

*(DOI-2NNN, FWS-3DDD)*

**5.3-D RESPONSE:** With regard to item 1, please see response to Comment 4.3-B. With regard to item 2, please see response to Comment 4.3.2-B. With regard to item 3, please see response to Comment 5.3-C.

**5.3-E COMMENT:** *Newark should remain a viable alternative. (NMFS-1K, HIN-3A, KLE-2C, HIN-1B, ECH-2D, WRU-2D, CAM-2A, GRE-3C, JAC-4C, MCSPCA-1C, DET-2E, SHA-1C, GLA-1, NOV-1B, HMP-2C, CAR-1E, HAB-1B, LTA-2C, BCBT-1B, HOF-2C)*

**5.3-E RESPONSE:** Based on the information made available to USACE, no practicable sites have been identified in Newark that would meet the project purpose. Please see Chapter 5.0 of the FEIS.

**5.3-F COMMENT:** *Keegan Landfill should be considered a viable alternative. (USEPA-1E, NJDEP-1VV, NMFS-1W, NMFS-1K)*

**5.3-F RESPONSE:** Please see the data contained in Appendix C and the analysis found in Section 5.4.4, Table 5.4-3, H11, which includes further discussion on the Keegan Landfill. In a letter dated October 4, 2000 and contained in the administrative record, NJMC stated that "the Keegan Landfill . . . will not be available as an alternative site for the Mills Project." DEIS, Section 5.3.2.3.2, provided a discussion of the characteristics of the Keegan Landfill relative to its development feasibility for this project.

**5.3-G COMMENT:** *The Sports and Exposition Authority site should be considered a viable alternative. (KOC-1B, GOM-1B, ED-2L, HIN-1D, DET-2D, HMP-2C, LAV-1A, MAK-1, HMP-4T, NYNJBK-3E, MRCC-3D, NJAS-2L, NMFS-1K, WAL-1B, USEPA-1E, NMFS-1W, NYNJBK-3B)*

**5.3-G RESPONSE:** Please see Section 5.4.4.4 of the FEIS.

**5.3-H COMMENT:** *The applicant relies primarily on a flawed and inadequate study of alternative sites relying on data collected in 1989. See DEIS Appendix K. The applicant also rejects several additional sites brought to USACE's attention through the permitting process. The applicant's alternatives analysis is inadequate for the following reasons:*

- A. *It fails to consider redevelopment sites.*
- B. *The six-county region is geographically inadequate because it fails to consider New York sites.*
- C. *It fails to consider sites at which 134 acres could be assembled through several purchases.*
- D. *It provides inadequate justification for rejecting sites.*
- E. *The primary study on which the applicant relies is greatly out of date. (ENVCOM-3GGG)*

**5.3-H RESPONSE:** With regard to item A, please see response to Comment 5.3-C. With regard to item B, please see response to Comment 5.0-A. With regard to item C, please see response to Comment 5.3.2.3-C. With regard to item D, please see response to Comment 5.3.2-A. With regard to item E, please see response to Comment 5.3-B.

#### **5.3.1.1 Geographic Requirements and Study Area for a Super-Regional Mixed-Use Commercial Development**

**5.3.1.1-A COMMENT:** *The search for off-site alternatives was too restricted by exclusion of sites in New York or Connecticut. In the area where Mills looks to draw many shoppers (from within a 40-mile radius) the search for off-site alternatives was too greatly restricted to a six-county area. (FWS-3AAA and DOI-2KKK)*

**5.3.1.1-A RESPONSE:** Please see responses to Comments 4.3.2-B and 5.0-A. As explained in response to Comment 4.3.2-B, although the project may draw customers from New York or Connecticut, the customers from the six county area of northeastern New Jersey are sufficient to support an economically viable retail/entertainment facility. Moreover, the applicant has demonstrated that the demand for hotel and office space in the six county area is sufficient to support the economic viability of the planned hotel and office facilities. Moreover, the consideration or selection of alternatives in New York or Connecticut would be inconsistent with the applicant's project purpose of constructing a mixed-use development in northeastern New Jersey.

**5.3.1.2 Minimum Parcel Size for a Super-Regional Mixed-Use Commercial Development**

**5.3.1.2-A COMMENT:** *The minimum parcel size established in the alternatives analysis is too large. (DOI-2JJJ, FWS-3ZZ, ED-2J, ED-2K, ED-2I, ED-2H)*

**5.3.1.2-A RESPONSE:** Please see response to Comment 5.0-A.

**5.3.2 Analysis of Alternative Sites**

**5.3.2-A COMMENT:** *Siting criteria for off-site alternatives (requiring property that is undeveloped, near a sports complex, with suitable zoning, no wetlands, high population density, high household income, near a major airport, and with access to a major highway) were too restrictive. (USEPA-1G)*

**5.3.2-A RESPONSE:** Sections 5.4.4.2 and 5.4.4.3 of the FEIS explain the derivation and application of the criteria utilized in the off-site alternatives analysis.

As explained in FEIS Section 5.4.4.2, tiers were established containing different types of criteria, including physical constraints (Tier 1 Criteria), regulatory and environmental limitations to development (Tier 2 Criteria), and logistical and economic constraints (Tier 3 Criteria). This tiered methodology was applied to the 103 sites identified as being greater than 115 acres within the six county area. Please see FEIS Section 5.4.4.3.

The FEIS provides for an explanation of each criterion utilized for every tier. Criteria include impacts to reservoirs and watersheds; impacts to wetlands and open water, extreme topography, inadequate zoning, incompatibility with surrounding land uses, other physical criteria. The economic viability criterion (which includes the subcriteria of population, income, proximity to major roadways, distance from competition, and appeal to tenants) was considered within the non-exclusionary third tier. No potential off-site alternatives were eliminated from further consideration based on economic criteria alone and these criteria are therefore not considered to unduly restrict the range of potentially available offsite alternatives.

**5.3.2-B COMMENT:** *A revised alternative analysis should be prepared to address out-of-date studies and newly identified potential sites. (ALL-4B, FORM-19B, HMP-4P, CAL-3A, NYNJBK-3A, DOI-2NNN, SCNJ-1F, FWS-3DDD, DOI-2I, DEL-4A, VRP-2C, LWVNJ-1B, NJDEP-1E, SCNJ-1A, RPA-1E, HMP-4P, CAL-3A)*

**5.3.2-B RESPONSE:** Please see response to Comments 5.0-A and 5.3-B.

**5.3.2-C COMMENT:** *The Three Criteria of Section 404(b) are clearly not met unless the Corps can prove that no other sites in the Bergen-Hudson area are feasible. (LWVNJ-1B)*

**5.3.2-C RESPONSE:** Please see the data contained in Appendix C and the analysis in Section 5.4.4.3 in the FEIS.

**5.3.2-D COMMENT:** *The 1992 analysis failed to consider the redevelopment of under used or abandoned sites or brownfields. As we have stated in our previous comment letters, alternative sites, including redevelopment sites, should be evaluated for each individual project component. (NMFS-1K)*

**5.3.2-D RESPONSE:** Please see response to Comment 5.3-C.

**5.3.2-E COMMENT:** *Section 5.3.2.1 (page 5.3-8) states that this analysis was based in part on the Cascino Engineering (January 1992) report included as Appendix K to the DEIS; it is not clear what other information/evaluations were used nor how this report was updated for use in the DEIS. For example, the Cascino Engineering report evaluated sites that were available in 1992; it is not known if additional sites, such as brownfields or other redevelopable parcels, are currently available for use. In addition, as discussed above, it is not clear if this technical appendix and its data/conclusions represent the position of the USACE, or are solely that of the applicant. (NJDEP-1E)*

**5.3.2-E RESPONSE:** As noted in Comment 5.0-A and Chapter 5.0 of the FEIS, the Cascino Engineering Report has been updated. Please refer to response to Comment 5.3.2-A for a description of the methodology used by USACE to evaluate site data generated by the applicant and others. The pertinent supporting site data are provided in Appendix C in the FEIS.

#### **5.3.2.1 Identification of Potential Alternative Sites**

**5.3.2.1-A COMMENT:** *The alternatives analysis is based upon the Cascino Report that was prepared in 1989 for a previously proposed 329-acre sized project. The report is outdated. (NMFS-1K, ENVCOM-3GGGG, NJAS-2K)*

**5.3.2.1-A RESPONSE:** Please see response to Comment 5.3.2-E

**5.3.2.1-B COMMENT:** *Page 5.3-10 states that the Cascino report was updated in 1999, but this update has not been provided for review. (NMFS-1K)*

**5.3.2.1-B RESPONSE:** Please see response to Comment 5.3.2-E.

**5.3.2.1-C COMMENT:** *Redevelopment areas such as urban areas in need of economic revitalization and brownfields should be considered. (NMFS-1K, DOI-2MMM, FWS-3CCC, ENVCOM-3RRR, ENVCOM-3GGGG, MIT-1B, POP-1D, MCCCCAW-1E, FER-1D, CHA-1D, GIL-1, CHA-1G, HIL-1B, GUE-1C, DEC-1A, WIL-1C, FRA-1B, STA-3G, CBBCF-3C, KLE-2C, SIM-1A, LAN-3C, CLA-1B, WEC-1E, WRI-2D, BCAS-2C, DES-1B, SOL-1, CAM-2A, FER-2C, SAC-1D, LSPC-1A, STE-3, ROB-1, BIL-1, HIN-1B, STA-1C, DOM-1B, STE-2A, GRE-3C, BOD-1A, PIN-1A, TEN-1A, ALL-1B, DOU-1B, BLA-1, ECH-2D, JAC-4C, FUC-1B, ROS-1B, NRPA-1F, MEY-2C, MCSPCA-1C, CHA-5A, DET-2E, ENG-1B, SHA-1C, GLA-1, NOV-1B, MAL-3B, CES-1, JOH-1, SCO-1C, STR-4, WEI-5B, MUR-4B, WAS-2B, PAC-1D, FORM-14F, FORM-17G, BOR-1E, POC-1B, USEPA-1G, MOY-1B, WAL-4B, WIN-2B, FORM-21C, WEI-4B, BRU-5C, FRA-4B, KAR-1A, HMP-4S, NJNJBK-1I)*

**5.3.2.1-C RESPONSE:** Redevelopment and brownfields sites have been considered in the updated alternatives analysis. Please see response to Comment 5.3-C.

#### **5.3.2.2 Results of Off-Site Alternatives Evaluation**

**5.3.2.2-A COMMENT:** *The applicant's preferred alternative is not in compliance with its own off-site alternatives analysis, as the existence of wetlands was used as a criterion excluding other sites. (DOI-2000, FWS-3EEE, NMFS-1K, ENVCOM-3HHHH, NJDEP-1F, ENVCOM-3IIII)*

**5.3.2.2-A RESPONSE:** Please see response to Comment 5.3.2-A.

**5.3.2.2-B COMMENT:** *Since the alternatives evaluated in the DEIS were for sites 132 acres or larger, it seems unlikely that many of the alternative sites would have more than 206 acres of impacts. Therefore the basis for alternative site rejection related to potential wetland impacts is unclear. (DOI-2000, FWS-3EEE)*

**5.3.2.2-B RESPONSE:** As noted in Chapter 5.0 of the FEIS, the 206-acre fill alternative has been eliminated from further analysis. Please refer to response to Comment 5.0-A.

**5.3.2.2-C COMMENT:** *Incompatible zoning is not necessarily a limiting criterion, as an applicant can apply for a variance, and municipalities are often amenable to zoning changes to improve the local economy and remediate former industrial sites. The existing project requires zoning variances. (USEPA-1G, HMP-4S, DOI-2PPP, FWS-3FFF, NJDEP-1F, ENVCOM-3JJJJ, HIL-2A)*

**5.3.2.2-C RESPONSE:** Please see response to Comment 5.3.2-A. No sites excluded in the DEIS have been rezoned so as to fulfill the project purpose.

**5.3.2.2-D COMMENT:** *Section 5.3.2.2 (page 5.3-10) refers to the 1992 Cascino Report and notes that it was updated in 1999 (but no updated report is referenced or provided as a technical appendix). The DEIS provides only a simple statement and accompanying table (Table 5.3-4) as a “summary of the primary and secondary results pertaining to potential alternative sites” that concludes that “all 47 sites ... that were evaluated exhibited primary and secondary constraints.” Among these “constraints” are wetland fill, zoning conflicts, and “other”; these are not explained/evaluated in any detail, nor is the relevance/importance of a “primary” versus a “secondary” constraint discussed. For example, it is unclear whether the “zoning conflicts” could be resolved through a variance process, or if permits to fill wetlands (of unidentified sizes,) could be pursued. Finally, based on market viability, “the applicant rejected each [off-site] location for a combination of reasons” (page 5.3-11I). Excluded sites include the two West Orange sites, the Piscataway site, and the Bayonne site because they are “not close to a major sports complex” and/or to “a major highway with suitable traffic volumes.” Finally, the DEIS does not state that the USACE has rejected any of these off-site locations based on market viability. (NJDEP-1F)*

**5.3.2.2-D RESPONSE:** Please see responses to Comments 5.3.2-A and 5.4.2-A.

### **5.3.2.3 Other Off-Site Alternatives**

**5.3.2.3-A COMMENT:** *Up to 48 specific sites (including 3 Hackensack Meadowlands Development Commission (HMDC) landfills, New Jersey Sports and Exposition Authority site in the Meadowlands and others) exist as practicable alternatives. (USEPA-1E, ENVCOM-3FFFF, HMP-4R, HMP-4U, SMW25-1B, WRI-5E, LF-5C, SCHC-1G, NRDC-2D, NYNJBK-1J, NYNJBK-2E, BAR-6C, LIN-2A, VRP-5A, SEL-1C, RAV-2C, LIS-2E, CON-9B, DEV-4C, SHE-3I, CAM-6C, SOL-2B, HOF-2B, SHE-4A, DEC-2B, ALA-2B, WEB-5, NYNJBK-3D, MRCC-3F, LWVBC-2D, ENVCOM-3EEEE, ANJEC-1B)*

**5.3.2.3-A RESPONSE:** The alternatives analysis presented in the FEIS considered sites in New Jersey suggested by commenters, as well as a number of undeveloped and brownfields sites. Pertinent data developed in this analysis are presented in Appendix C and the findings of USACE’s off-site alternatives analysis are summarized in Table 5.4-3 and Section 5.4.4.3 of the FEIS. The analysis contained in Section 5.4.4 demonstrates that many of the sites, identified by the commenters, are not available for development,

and of those sites that are potentially available, each site appears to be excluded from further consideration based on two or more criteria. With respect to the use of the NJSEA property, please see response to Comment 5.3-G.

**5.3.2.3-B COMMENT:** *Several smaller upland parcels next to each other could accommodate the project. (NJAS-2J, HMP-3C)*

**5.3.2.3-B RESPONSE:** Aggregation by a developer of numerous smaller parcels from different owners, in order to reach an appropriate parcel size, is not considered to be practicable because of time and procedural complexities. Such aggregation is generally feasible only when a developer has identified a parcel that substantially satisfies a project's purpose and has the opportunity to acquire adjacent property.

In addition, analysis of alternatives resulting from aggregation of potential properties would be unrealistic due to the number of potential permutations that would have to be considered as well as the uncertainty surrounding each. USACE would consider specific proposals for aggregation of properties proposed by redevelopment agencies or other land-use agencies. No such proposals have been offered at this time.

**5.3.2.3-C COMMENT:** *A number of sites are available and should be considered in the alternatives analysis. (see Comment codes for 5.3.2.3-A)*

**5.3.2.3-C RESPONSE:** Please see responses to Comments 5.0-A and 5.3-B, as well as Table 5.4-3 and Section 5.4.4.3 in this FEIS.

**5.3.2.3-D COMMENT:** *There are at least seven additional large New Jersey sites that are available as alternative sites that have not been considered in the DEIS:*

- 1) *Talerico Site in Jersey City*
- 2) *Port Reading property in Woodbridge*
- 3) *North Avenue East in Elizabeth*
- 4) *National Lead Company Site in Sayreville*
- 5) *Military Ocean Terminal Site in Bayonne*
- 6) *Hercules in Sayreville'*
- 7) *Talerico in Sayreville*
- 8) *PSE&G Site in Harrison*
- 9) *EPA Brownfields sites*  
(ENVCOM-3FFFF)

**5.3.2.3-D RESPONSE:** Each of the identified sites and all EPA brownfields sites satisfying the minimum acreage requirements have been evaluated in the updated alternatives analysis contained in Section 5.4.4.3. See response to Comment 5.3-B.

### **5.3.2.3.1 City of Newark**

**5.3.2.3.1-A COMMENT:** *Newark, with its highways, rail transportation, airport and shipping facilities, is just as convenient to corporate and business people and customers from the metropolitan area. (HAB-1B, LTA-2C, BCBT-1B, HOF-2C, CAR-1E, CON-9B, HMP-4U, WRI-5E, SCHC-1G, WRDC-2D, NYNJBK-2E, LIS-2E)*

**5.3.2.3.1-A RESPONSE:** Please see the DEIS, Section 5.3.2.3.1. In addition, the updated alternatives analysis summarized in Section 5.4.4.3 of the FEIS considered a number of sites in Newark, including brownfields sites. Please also see response to Comment 5.3-E.

### **5.3.2.3.2 Keegan Landfill**

**5.3.2.3.2-A COMMENT:** *The HMDC has designated the Keegan Landfill as a redevelopment site. The site is not available as an alternate site location for the project. (HMDC-2C)*

**5.3.2.3.2-A RESPONSE:** See DEIS Section 5.3.2.3.2. The updated alternatives analysis contained in the FEIS evaluated the Keegan Landfill and concluded that the site is not available. Please also see response to Comment 5.3-F.

### **5.3.2.3.3 New Jersey Sports and Exposition Authority Sites**

**5.3.2.3.3-A COMMENT:** *The Continental Arena site should be considered as an alternative site. Environmental impacts would be minimized and transportation infrastructure is available. (KOC-1B, GOM-1B, ED-2L, HIN-1D, NJAS-2L, DET-2D, HMP-2C, HMP-4T, NMFS-1K, LAV-1A, MAK-1, NYNJBK-3E, MRCC-3D, NMFS-1K, WAL-1B)*

**5.3.2.3.3-A RESPONSE:** Please see response to Comment 5.3-G.

## **5.4.2 Mills Siting and Market Viability Criteria**

**5.4.2-A COMMENT:** *The criteria Mills used to exclude sites from consideration as an alternative to the Empire Tract are too exclusionary and are not justified. Criteria such as not being close to a major sports complex, distance to major airports and household income are too restrictive. (NJDEP-1F, ENVCOM-3KKKK, NMFS-1K, ENVCOM-3GGGG, DOI-2QQQ, FWS-3GGG, USEPA-1G)*

**5.4.2-A RESPONSE:** Please see response to Comment 5.3.2-A.



**5.4.2-B COMMENT:** *Sparse population and lack of proximity to a major sports complex are inappropriate reasons to reject alternative sites. The applicant has stated that the proposed project would be a "destination" and that the major access to the proposed development would be via the New Jersey Turnpike, a major highway. Therefore, population density in the immediate vicinity of the project does not appear to be a critical site-location factor, provided access via a major highway is available. The Service also notes that the area evaluated for proposed alternatives is one of the most densely populated areas in the country. To reject any project site in this area due to lack of population density is not justified. (DOI-2QQQ, FWS-3GGG)*

**5.4.2-B RESPONSE:** Comment noted. Please see response to Comment 5.3.2-A, and Chapter 5.0 of the FEIS.

## **5.5 Alternative Methods of Construction**

**5.5-A COMMENT:** *Alternatives to all components of the proposed project must be separately considered in light of the purpose of the project as determined by USACE, not the developer. (USEPA-1E)*

**5.5-A RESPONSE:** Please see response to Comment 5.0-A. Please see discussion of overall project purpose in Chapter 4.0 of the FEIS.

### **5.5.1.2 Current Development Footprint Alternatives (1990-Present)**

**5.5.1.2-A COMMENT:** *It appears that the proposed Meadowlands Mills Alternative and Alternative A would not be consistent with the objectives of the Federal Register notice. (NJDEP-1G)*

**5.5.1.2-A RESPONSE:** Please see response to Comment 2.1-C.

**5.5.1.2-B COMMENT:** *The individual component amounts of Alternative D are not listed in the DEIS. (HMDC-2B)*

**5.5.1.2-B RESPONSE:** As explained in DEIS Section 5.5.1.2.6, the Alternative D project components total 4,643,342 square feet of development on 96 acres, 90.5 of which are wetlands fill. Alternatives D and E have the same mixed-use development components (see Table 4.2-1 of DEIS). They have a retail/entertainment center (2,583,342 sq. ft.), office center (1,500,000 sq. ft.), hotel conference center (500,000 sq. ft.), warehousing/distribution (50,000 sq. ft.), and transit facility (10,000 sq. ft.).

**5.5.1.2-C COMMENT:** *The Saffron Report was not included in the Appendix. (NJDEP-1D)*

**5.5.1.2-C RESPONSE:** The Saffron Report is included in the administrative record of the application. USACE analysis of on-site minimization is provided in Section 5.5. Individual commenters may review the Saffron Report at the USACE office upon request.

#### **5.5.1.4 Evaluation of Development Footprint Alternatives**

**5.5.1.4-A COMMENT:** *Retail and entertainment components, as well as non-retail components, could be stacked to a greater extent. (ED-1H)*

**5.5.1.4-A RESPONSE:** The construction alternatives in the DEIS and FEIS present a range of stacking of the retail and entertainment components of the project. The concept of stacking components to reduce the footprint of the mixed-use development was used in several of the development alternatives considered (see Sections 5.5.1.4). The potential for stacking of the retail and entertainment component of the mixed-use development was considered and examined by considering one to three story structures under different development alternatives. As noted in Section 5.5.1.4, multilevel configurations for the retail/entertainment center were used to reduce the potential project footprint size.

**5.5.1.4-B COMMENT:** *The alternative designs considered are too narrow in scope. Design configurations do exist that would allow for a reduction in the minimum parcel size. (NMFS-1K)*

**5.5.1.4-B RESPONSE:** Minimum parcel size is discussed in the response to Comment 5.0-A. The construction design alternatives presented in the FEIS provide a range of designs in order to explore ways of decreasing the footprint size of the mixed-use development. As part of the alternatives analysis, a method seeking to determine the minimum site size for the mixed-use development was developed (see Section 5.4.3 of the FEIS). A footprint of 132 to 215 acres was identified as a representative range for a general mixed-use commercial development. The construction design alternatives, including the Meadowlands Mills Alternative and Empire Tract Alternatives A, B, C, D, and E have a development footprint between 138 and 212 acres. The major criteria used to review and evaluate the development alternatives were technology and logistics, economics, and environmental consequences (See FEIS Chapter 5.0). The evaluation of the development alternatives using these criteria is summarized in Section 5.5.1.4. Additional review of the environmental consequences and socioeconomic impacts from the project Empire Tract Alternatives D and E are presented in Chapter 7.0 of the FEIS.

**5.5.1.4-C COMMENT:** *Alternatives C and D appear to be consistent with the most recent SAMP proposal. Alternatives A and B are inconsistent with the current direction*

of the Hackensack Meadowlands SAMP. (NJDEP-1B, HMDC-1A, USEPA-1B, HMDC-2B, NJDEP-1G)

**5.5.1.4-C RESPONSE:** Comment noted. The NJMC withdrew as sponsor of the SAMP on February 6, 2002. See also response to Comment 2.1-C.

**5.5.1.4-D COMMENT:** *The Corp's alternative analysis seems to insure that all square footage of Empire be used. One alternative that should be considered is one that is significantly scaled back, not only in terms of its footprint, but in terms of multi-tiered parking and a multi-tiered structure. (ED-1H)*

**5.5.1.4-D RESPONSE:** Over the past, the project footprint was reduced by the applicant from over 400 acres of fill to 134 acres. The applicant has indicated that further reduction of footprint through increased density using a multi-storied structure would result in an economically non-viable project. Please see Chapter 5.0 of the FEIS.

#### **5.5.2.1.1 Fill Material**

**5.5.2.1.1-A COMMENT:** *The impacts of the construction and operation of fill facilities, such as rail or barge, should be evaluated. (NJDEP-1II)*

**5.5.2.1.1-A RESPONSE:** Section 5.5.2.1 of the DEIS states that "Clean fill would be transported to the site by a combination of truck, railroad, and/or barge." No additional wetland fill impact areas on the Empire Tract would be required for the construction and operation of any fill handling or transportation facilities, beyond that area already proposed for the development, infrastructure and transportation components of the project.

According to the applicant, the fill for construction of the project would be transported by trucks from the fill sources to the site. The traffic impacts associated with the fill activities will be less than the worst-case traffic conditions considered in the revised traffic analysis. The use of rail to transport fill to the site is unlikely, but if pursued, an off-site, existing transfer facility in the local area would be used where fill on the rail cars would be transferred to the trucks for final delivery to the project site.

Barging on the Hackensack River is also a possible transportation mode for fill, but fraught with logistical problems and increased costs and not presently considered a practicable alternative by the applicant. Barges could be brought upriver from existing transfer facilities, but their numbers would be limited by several bridge openings and distance to travel, and any barged material would then have to be unloaded onto trucks for delivery to the project site. This would probably require additional docking and unloading facilities along the river shoreline. All of these factors make barging of fill materials to the site unlikely.

**5.5.2.1.2 Foundation Construction**

**5.5.2.1.2-A COMMENT:** *Infrastructure costs will be increased due to the soft soil conditions underlying the site. (TCBC-1A, CER-2B)*

**5.5.2.1.2-A RESPONSE:** Comment noted.

**5.5.2.1.2-B COMMENT:** *Stringent seismic engineering controls should be required for the project. (TCBC-1C, TCBC-1D)*

**5.5.2.1.2-B RESPONSE:** A seismic design and analysis of the foundation elements of the buildings was performed as part of the engineering of the buildings (See FEIS Section 5.5.2.1). In the event of permit issuance, the findings of this report, as well as other analyses, would be used by the applicant for the final design of the foundation elements and buildings for seismic events in compliance with applicable local, State and Federal codes and regulations.

**5.5.2.1.4 Roadway Alternatives and Footprint Minimization**

**5.5.2.1.4-A COMMENT:** *There is no alternatives analysis to the applicant's proposed roadway design to show that this is the only solution to accommodating the project's traffic impact. (HMDC-2H)*

**5.5.2.1.4-A RESPONSE:** Section 5.5.2.1.4 of the DEIS presents alternatives to the applicant's proposed roadway design and a summary of the development of a transportation plan for the project. Section 5.5.2.3 of the FEIS describes the development of the current transportation plan and the considerations to reduce the footprint of the roadway.

Abandonment of the construction of Route 120B in combination with the revised roadway layout presented in the FEIS reduces potential wetland fill compared to the roadway system presented in the DEIS. (See FEIS Sections 5.5.2.3, 7.14, and 7.15). Wetlands minimization of the transportation facilities is described in the FEIS Section 5.5.2.3. Potential wetland fill minimization techniques including embankment slope reduction, use of retaining walls, pile-supported structures and reduction of the width of the roadway berm were considered.

**5.5.2.1.4-B COMMENT:** *The document fails to demonstrate a need for the transportation projects as proposed in all of the on-site alternatives, and it does not appear that any minimization has been attempted. (NMFS-1H)*

**5.5.2.1.4-B RESPONSE:** Please see response to Comment 5.5.2.1.4-A. Also, NJMC has a regional traffic plan for the area that includes the Empire Tract and the applicant's

project. NJMC is requiring the applicant to adopt, fund, and construct a portion of the NJMC plan as it relates to the Empire Tract. This revised traffic plan is presented in Section 7.14 the FEIS. The plan is very similar for each alternative, thus the overall impacts analysis in the FEIS is provided for Empire Tract Alternative E only. The amount of fill is limited due to the specific engineering design requirements prescribed by the NJMC Master Roadway Plan and by the NJ Turnpike Authority for new connections to the NJ Turnpike. Please also see response to Comments on Chapters 7.14 and 7.15 regarding the NJMC plan.

**5.5.2.1.4-C COMMENT:** *There may be greater wetland impacts for some or all of the proposed transportation projects. The proposed wetland fill acreage for the transportation component of the project should be provided. (NMFS-1H)*

**5.5.2.1.4-C RESPONSE:** The transportation components of the construction alternatives are presented in Sections 5.5.2.3 and 7.14 of the FEIS. The basic traffic design of Routes 120A and 120B and associated ramps and connections do not appreciably change for the construction alternatives, but the alignment and shape of the roadways is varied. NJMC has introduced an additional roadway design for the project that eliminates Route 120B, thereby reducing potential fragmentation impacts to the wetlands mitigation area.

The potential wetland impacts for these transportation components for the construction alternatives are similar. As noted in Section 5.5.1.4.7, the wetland fill estimate for the transportation components of the project for Empire Tract Alternative E is 43.5 acres. The most recent transportation plan for the project, based upon the NJMC alternative, eliminates Route 120B and increases the size of the footprint of Route 120A. This roadway alternative has approximately 43.6 acres of wetland fill.

**5.5.2.1.4-D COMMENT:** *The document needs to provide a convincing demonstration that all of the roadways are necessary to meet the transportation needs of the project and that the least damaging routes for these roadways have been chosen. (NMFS-1H, USEPA-1H, USEPA-1O, HMDC-2H)*

**5.5.2.1.4-D RESPONSE:** See response to Comment 5.5.2.1.4-B.

**5.5.2.1.4-E COMMENT:** *The concept and justification provided for the transportation component of the proposed development is based on an outdated transportation plan. (ENVCOM-3AAAAA, HMDC-2G)*

**5.5.2.1.4-E RESPONSE:** Please see response to Comments 5.5.2.1.4-A and 5.5.2.1.4-B.

**5.5.2.1.4-G COMMENT:** *The Route 120B Connector Road should be evaluated, since it would hydrologically isolate 120 acres of wetlands which are proposed for mitigation from the rest of the site proposed to remain as wetlands. (USEPA-1H)*

**5.5.2.1.4-G RESPONSE:** The Route 120B Connector Road has been removed from the project's transportation plan for Empire Tract Alternative E based upon the NJMC regional traffic plan. Please see Chapters 7.14 and 7.15 of the FEIS.

#### 14.4.4 Chapter 6 Comments and Responses

**6.0-A COMMENT:** *The flora and fauna surveys conducted for the project site are inadequate and are not indicative of the true species composition of the fauna. (ENVCOM-3BB, ENVCOM-3FF, KIV-1)*

**6.0-A RESPONSE:** USACE has reviewed the information provided by the applicant in support of the permit application and has concluded it provides a sufficient basis for preparation of an EIS. The specific surveys and data are summarized in both the DEIS and FEIS documents. Assumptions/limitations and the sampling effort are clearly identified in those documents. It should be noted that the avian study conducted by the applicant and required by USACE was a yearlong study. The level of effort applied toward other studies such as the small mammal inventory, reptile/amphibian, and fish studies is commensurate with what would be expected on the basis of habitat present, other regional flora and fauna studies within the area, and site conditions (e.g. the presence of tide gates limiting fish migration from the river onto the site). These conditions and studies are also summarized and discussed in the DEIS (e.g. New Jersey Audubon Society birding records, and New Jersey Breeding Bird Atlas information).

**6.0-B COMMENT:** *The project area provides habitat for various forms of wildlife. (POP-2A, STE-4, PLA-1B, LF-9D, LF-10B, SH-1C, VRP-5D, HMP-3B, HMP-3K, HMP-4I, NRDC-2E, LAC-1C, LIM-1B, LIS-2A, MAN-4F, PHI-3B, POR-2B, SHE-6A, WEI-4C, WIN-3Y)*

**6.0-B RESPONSE:** Section 6.5 of the DEIS and FEIS describe the wildlife habitat present on site within a regional context, and Section 7.5 focuses on both site and regional impacts. Chapter 8.0 evaluates the applicant's proposed wetlands mitigation plan for compensating for these impacts.

##### 6.1.1 Regional Setting

**6.1.1-A COMMENT:** *Preservation of open space in this metropolitan region is important. (ENVCOM-3TT, DEC-G1, FORM-18B, MCCCW-1A, BAR-3, HIL-1C, HIN-3B, HRB-1B, KOH-1C, LIS-2D, RIG-1B, RZE-1A, SHE-3A, SWA-1, HMPA-1A)*

**6.1.1-A RESPONSE:** Comment noted. The DEIS and FEIS both include discussion of the No-Action Alternative. USACE will consider public perspectives in preparing the ROD. The issue of open space is discussed in Sections 7.10 (Aesthetics) and 7.21 (Land Use and Zoning) of the FEIS. The *Master Plan* and *District Zoning Regulations* currently in place for the Hackensack Meadowlands District, both of which address the provision of open space on a regional basis, designate the Empire Tract for development. The applicant has expressed intent to develop the property, in light of which, preservation of the entire site is not expected. The project would provide for

some wetland restoration and enhancement activities on the portion of the Empire Tract remaining undeveloped.

**6.1.1-B COMMENT:** *The Meadowlands are a buffer between New York City and highly populated parts of New Jersey. (PER-3, NA-2B)*

**6.1.1-B RESPONSE:** Comment noted.

### **6.1.2 Empire Tract**

**6.1.2-A COMMENT:** *Preserving the project area as a natural area is important. (AND-1B, LAN-3A, SCHC-1B)*

**6.1.2-A RESPONSE:** The DEIS and FEIS both include discussion of the No-Action Alternative. USACE will consider public perspectives in preparing the ROD. Please also see response to comment 6.11-A

**6.1.2-B COMMENT:** *The project site has been recognized as regionally significant by many agencies and organizations. (DOI-2F, FWS-3D, DOI-2K, MCCCCAW-1C, HMP-4A, HMP-4B, HMP-4D, NJCF-1G, NYNJBK-1C)*

**6.1.2-B RESPONSE:** Sections 6.2, 6.9 and 6.21 of the DEIS and FEIS describe various designations of the Empire Tract project site and Hackensack Meadowlands region by different agencies and their programs. Such designations are regional in nature, and are not limited to the Empire Tract. The Empire Tract is one of several properties under consideration for acquisition by the New York/New Jersey Harbor Estuary Program (HEP), but this would be contingent upon landowner approval and funding, and USACE is unaware of any specific plans for this to occur. As such, acquisition under the HEP is not considered to be likely in the foreseeable future, so it was not considered under the No-Action Alternative in the FEIS.

### **6.1.3.2 Hydrologic Cycle of the Empire Tract**

**6.1.3.2-A COMMENT:** *The hydrology of the site is poorly characterized, due to lack of accurate and complete data describing flows between marsh, upland, and river. (WIN-3L)*

**6.1.3.2-A RESPONSE:** As noted in the DEIS, at the time of DEIS preparation hydrological studies conducted by the applicant were still in progress. These studies have been completed, and provide a sufficient basis for characterization of site hydrology and impacts that would result from the proposed development alternatives. Please see the



FEIS Sections 6.1, 6.2, 6.13 and Appendix B for revised text that incorporates the results of these studies. These sections provide both a summary of the existing and projected future site-specific hydrological characteristics, as well as references to the supporting studies upon which the summary is based.

**6.1.3.2-B COMMENT:** *The idealized diagram of site hydrology is inaccurate and inconsistent with hydrologic principals. An accurate, scientifically based discussion of site hydrology is needed. (WIN-2L)*

**6.1.3.2-B RESPONSE:** The idealized diagram has been revised to address the commenter's concerns by showing arrows indicative of flows that were omitted from the version presented in the DEIS. Please see response to Comment 6.1.3.2-A. The hydrology of the Empire Tract has been characterized through various site-specific and Hackensack River studies, as described in this FEIS (see Sections 6.1, 6.2, 6.3, and 6.13 in this FEIS). A summary of the hydrology of the wetlands on the Empire Tract is presented in Section 6.2.3.3 of this FEIS.

**6.1.3.2-C COMMENT:** *The results of the hydrology, sediment toxicant retention/water quality, and nutrient cycling studies currently underway need to be incorporated into the FEIS to accurately assess impacts. (NMFS-1N, NJDEP-1S)*

**6.1.3.2-C RESPONSE:** Please see the response to Comment 6.1.3.2-A. The results of the additional studies and analyses completed since the publication of the DEIS in July 2000 have been incorporated into the FEIS. The wetland impacts analysis presented of in Section 7.2 of the FEIS reflects these additional studies.

**6.1.3.2-D COMMENT:** *Could the results of these studies change the conclusions of the EIS? (NJDEP-1S)*

**6.1.3.2-D RESPONSE:** The results of these studies have provided necessary information to evaluate the findings of the DEIS, and, where appropriate, to support necessary revisions as presented in the FEIS. The most significant finding of the additional studies was that permeability of the site creek banks is sufficient to allow lateral movement of water from the creeks into the site during periods when a sufficient hydraulic gradient exists.

## **6.2 Wetlands and Other Special Aquatic Sites**

**6.2-A COMMENT:** *The IVA methodology appears to recognize the spikerush *Eleocharis parvula* as a favorable element of waterfowl habitat in the HMD (KIV-1).*

**6.2-A RESPONSE:** The commenter is correct. Based upon the success of certain mitigation projects within the HMD, the IVA methodology developed for the HMD recognizes spikerush as an important waterfowl food source and, therefore, the IVA point score reflects its importance for waterfowl habitat.

**6.2-B COMMENT:** *In the DEIS (6.2-14) it is stated that the "brackish" areas of the site have salinity greater than 0.5 ppt. Does this refer to mean salinity, maximum salinity, or something else (KIV-1)?*

**6.2-B RESPONSE:** As indicated in the legend of DEIS Figure 6.2-9, the line delineating portions of the project site with salinity levels greater than 0.5 ppt from portions of the project site with salinity levels less than or equal to 0.5 ppt was located based upon data gathered from on-site water sampling in June and July 1991. This line was based on instantaneous individual data at each sampling point and does not represent an average. The salinity line probably moves up and down the creeks based on seasonal and meteorological events, and is included only as a guideline of the approximate extent of saline influence.

**6.2-C COMMENT:** *The apparent confusion about the dominant plants of the mixed reed communities near the TransCo pipeline road and near Moonachie Creek, and the numerous misspellings in scientific names of plants (see below), as well as the absence of a site-specific flora survey and rare plant survey of the Mills site, indicate a serious lack of study of the flora of the site and the absence of a professional botanist from the team that prepared the DEIS (KIV-1).*

**6.2-C RESPONSE:** The misspellings of plant names have been corrected by USACE and are presented in the FEIS. The plant communities found on the site are summarized in Section 6.2.3.2 of the FEIS, and are based upon information provided by the applicant's consultant from field surveys of the Empire Tract. Subsequent to publication of the DEIS, USACE conducted a one-day field reconnaissance in which the dominant plant species along the Transco Pipeline right of way (ROW) were noted, as well as the area along a portion of Moonachie Creek that was described in the DEIS as a mixed common reed – panic grass community. On the basis of that reconnaissance, USACE agrees that the plant diversity along the Transco ROW is higher than indicated in the DEIS. It should be noted that the plants present were mostly early-successional upland species growing within the ROW itself, and like many plant communities of similar habitats within the region, have a significant component consisting of European invasive species. In addition, USACE confirmed a commenter's contention that the area described as a mixed common reed – panic grass community was not dominated by panic grass. The dominant grass was identified as bluejoint grass (*Calamagrostis canadensis*); the plant itself being identified by James Quinn Ph.D of Rutgers University. The FEIS reflects this fact. These facts do not indicate the presence of any additional rare or threatened species.

**6.2-D COMMENT:** *In addition, the DEIS states that a variety of studies that could effect the conclusions of the impact analyses are still underway. These include evaluations of wetland hydrology/modeling (Section 6.2.3.3, page 6.2-16), sediment toxicant retention/water quality improvement (Section 6.2.3.5.1, page 6.2-25), and organic-Carbon/production export (Section 6.2.5.3.2, page 6.2-28). It is not clear how these studies will be incorporated into the Final DEIS for this project, nor whether the results of these studies could change the conclusions of the DEIS. (NJDEP-1S)*

**6.2-D RESPONSE:** Please see the responses to Comments 6.1.3.2-A and 6.1.3.2-D.

**6.2-E COMMENT:** *We also have concerns about the adequacy of the data used to describe the hydrology of the site, as the interaction between the creeks and the wetlands may have been underestimated. We understand that additional hydrologic studies are being required. This information should have been included in the DEIS so the impacts of any development on the site could be assessed adequately. (NMFS-1N)*

**6.2-E RESPONSE:** Please see the responses to Comments 6.1.3.2-A and 6.1.3.2-D. The additional information was not available as of publication of the DEIS. Studies performed in the Fall of 2000 and Winter of 2001 provided additional data concerning the level of interaction between the creeks and wetlands. For mass balance and wetland mitigation analyses, the interaction between the creeks and wetlands was taken into consideration in assessing potential interactions and movement of water in the system to evaluate wetland functions and potential impacts. Please see FEIS Sections 6.2, 7.2, and Appendix B.

**6.2-F COMMENT:** *Perhaps the largest inaccuracy in the DEIS is the indictment of Phragmites-dominated wetlands as degraded at best and a fire hazard at worst. In fact, Phragmites-dominated wetlands are: (1) more productive of biomass and detritus on a per-acre basis than *Spartina alterniflora*; (2) capable of providing significant support for nekton use; and (3) excellent at improving water quality. Furthermore, the rates of important wetlands functions such as nutrient removal, trophic transfer, sedimentation, metal sequestration and wildlife support (from benthos to migrating birds), generally continue to improve when Phragmites begins to dominate a marsh. (ENVCOM-3N)*

**6.2-F RESPONSE:** As mentioned in the DEIS, the habitat value of common reed, or *Phragmites australis* is a controversial issue. More information and studies are continually being published regarding the functions of common reed wetlands. USACE agrees with many of the comments raised regarding the functions provided by common reed. However, it is important to recognize that the studies cited by commenters and the functions provided by common reed are largely tied to hydrological inundation affecting the opportunity for common reed to perform these functions. In cases where tide gates

and other measures restrict surface water flows to a site, the opportunity for water quality treatment and certain other functions (e.g. quality waterfowl habitat and juvenile fish habitat), and even to some extent organic carbon export is diminished. The focus of tidal restoration programs is on restoring inundation in order to increase the opportunity for the wetlands to perform those functions.

With respect to the first point, the DEIS and FEIS note that common reed has a higher per acre biomass than *Spartina*. In addition, studies along the Delaware River using radioisotopes as tracers have indicated that common reed exports organic matter into the river, where it is used as a food source by fish. What is not as clear is how that translates to the actual export of organic carbon in systems that are not subject to tidal inundation, relative to ones that are. Other factors such as the degree to which standing biomass decomposes, and the relative availability of different sources (e.g. *Phragmites* wrack versus total organic carbon measured in the water column) need to be considered as well. USACE addressed this issue based upon the limited scientific literature on the subject, especially with respect to the potential effectiveness of mitigation in offsetting project impacts on these functions. The mass balance analysis presented in the FEIS indicates that the site would export more dissolved carbon under future conditions with mitigation than under existing conditions (see Appendix B in this FEIS).

The second point addresses nekton. The studies mentioned above indicate that fish use carbon exported from common reed marshes. On the Empire Tract, however, the present use of the site by fish is limited to creeks since the site is seldom inundated by creek overflow and the marsh elevation is high enough to inhibit the movement of fish from creeks to the marsh.

The third point addresses water quality improvement. Common reed certainly provides excellent water quality treatment. The vegetation must come into contact with surface water in order to do so. It is clear from review of the data provided by the applicant concerning wetlands on the Empire Tract that the site is not regularly inundated, and hence water quality improvement functions are limited to treatment of precipitation falling directly onto the site, as well as what surface water is capable of moving laterally from site creeks into the adjacent wetland itself when hydraulic gradient conditions are favorable.

**6.2-G COMMENT:** *Common reed very definitely provides a range of beneficial wetland functions and the notion that it is a plant with no value is false and no longer a widely held view in the scientific community. (WIN-3CC, ENVCOM-3N, WIN-1C, ENVCOM-3O, ENVCOM-3Q)*

**6.2-G RESPONSE:** Please see the response to Comment 6.2-F. Section 6.5 describes the wildlife habitat provided by common reed and cites other studies documenting the use of common reed by different species groups. The DEIS pointed out that habitat quality for many species groups, such as juvenile fish and others of management priority in the

HMD, would improve under tidal inundation. This is one important basis for coastal and riverine wetland restoration programs in the Northeastern United States. A key issue of the FEIS is not whether or not common reed has value, but whether the values and functions of the mitigation plan (ie., tidal marsh restoration) are capable of offsetting the impacts to the existing functions and values of the common reed wetlands present on the Empire Tract.

**6.2-H COMMENT:** *The Empire Tract functions as a corridor in the center of the Meadowlands. (DOI-2N, FWS-3G, FWS-2D, HMP-3L)*

**6.2-H RESPONSE:** Comment noted. Potential landscape level effects of the project are discussed in the DEIS and FEIS in Sections 7.2, 7.5, 7.8, 7.24 and Chapter 8.0.

**6.2-I COMMENT:** *The functional values of the present wetlands are understated: wildlife habitat and migratory path, flood attenuation, water quality improvement and open space. (ENVCOM-3M, WIN-3B, BEV-1B, KIB-1D, SAL-2B, NEL-1B, RAV-1D, WEI-3C, LES-1B, FORM-14D, HMPA-1B, GAN-1A)*

**6.2-I RESPONSE:** The functional values of the existing wetlands on the Empire Tract were assessed both qualitatively, as well as on the basis of site-specific quantitative studies summarized in Sections 6.2 and 7.2, and in Appendix B. Where appropriate, the limitations of these studies have been discussed.

**6.2-J COMMENT:** *Phragmites-dominated marshes have greater ecological value than the DEIS indicates. No citations are found on any of the recent studies (from 1995 on) that have been published on ecosystem processes in Phragmites-dominated marshes, most of which show neutral impacts or an enhancement of wetland functions when they are compared with other tidal marsh communities. (WIN-3CC, WIN-1A, MRCC-1C, NJAS-2N, NJAS-2O)*

**6.2-J RESPONSE:** Please see the response to Comment 6.2-F. Some of the papers cited by the commenter were not published at the time of DEIS preparation. Many of the papers cited deal primarily with common reed communities that are tidally inundated on a daily basis and are not tidally restricted like those found on the Empire Tract. These include Meyer and Gill, 1998; Meyerson et. al., 2000; Wainright et. al., 2000; Rilling et. al., 1998; Meyers et. al., 2000; and Weinstein et. al., 2000. Where appropriate, facets of these studies that are applicable to the analysis were incorporated into the FEIS; USACE found the studies cited by the commenters to be helpful.

**6.2-K COMMENT:** *The size of the wetlands in the proposed project area makes the ecological value of the site greater. (DOI-2BB, FWS-3U, DOI-2CC, FWS-3V, CRO-2A, CAM-1B, HMP-3A, WAL-5C)*

**6.2-K RESPONSE:** The influence of the size of the wetlands on the Empire Tract was one of several factors considered in assessing the ecological functions of the wetlands, including the use of the habitat by wildlife and habitat fragmentation (see Sections 6.2, 6.5, 7.2, and 7.5 of the DEIS and FEIS. This point is also taken into account in the IVA methodology presented in Section 6.2.3.4. Review of the data sheets (see Appendix A of the FEIS) indicates that IVA assigns additional value to the scores of those sites greater than 40 and 200 acres. Wetland Assessment Area "2E" is the largest assessment area on the Empire Tract and received additional IVA points for its size. Therefore, the IVA took into account the size of the wetlands in assessing the ecological value of the wetlands, both for pre-construction and post-construction conditions.

**6.2-L COMMENT:** *The current condition of the wetlands on the project site is caused by development as well as mosquito control. (NJAS-1C, HMP-3J)*

**6.2-L RESPONSE:** Section 6.2 of the DEIS and FEIS documents the historical activities that have influenced and created the existing conditions on the Empire Tract, including development of adjacent lands and diking and ditching for mosquito control. That section indicates that human influence is responsible for the current wetland conditions on the site. The role of human influence on water quality of the Hackensack River is further discussed in Section 6.3.

**6.2-M COMMENT:** *Preservation of wetlands is the most important issue. (SEI-1, BOD-1B, PIN-1B, DON-1, PAR-2, SAG-2A)*

**6.2-M RESPONSE:** Please see the response to Comment 6.1.1-A

#### **6.2.1.2 Wetland Functions and Values**

**6.2.1.2-A COMMENT:** *The positive value of Phragmites-dominated marshes is documented in scientific literature. (ENVCOM-3N, ENVCOM-3O, ENVCOM-3Q)*

**6.2.1.2-A RESPONSE:** Please see the response to Comments 6.2-F, 6.2-G and 6.2-J.

**6.2.1.2-B COMMENT:** *Wetlands are the natural sponge that absorbs the water in time of floods. Replacing that with an impervious surface not only limits the effectiveness of what the wetlands does best, it also increases the speed of water, runoff into our bodies of water, enhancing the flash flood aspect of flooding. (VR-1A)*

**6.2.1.2-B RESPONSE:** Comment noted.

### **6.2.1.3 Wetland Functional Assessment Methodologies**

**6.2.1.3-A COMMENT:** *Summaries of the “WET Assessment Method” and results of the AVID, as applicable to the Empire Tract, should be provided. (NJDEP-1JJ)*

**6.2.1.3-A RESPONSE:** Section 6.2 and Appendix A in the FEIS provide a summary of the IVA method used to evaluate existing and projected future wetland functions. The WET method and AVID results are from the mid-1990s and are supplemented by the more recent IVA method that focuses specifically on the HMD. The IVA method incorporates site-specific data collected by the applicant and site observations by the USACE.

### **6.2.2 Regional Setting**

**6.2.2-A COMMENT:** *The proposed project area has high value as open space and wildlife habitat due to its size, continuity, scarcity, and geographic location. (NJDEP-1U, FORM-1B, THO-2, HMP-3M, HMP-4J)*

**6.2.2-A RESPONSE:** Please see responses to Comments 6.1.1-A and 6.2-K above.

**6.2.2-B COMMENT:** *The Meadowlands has been identified as an aquatic resource of national importance by Federal agencies. (DOI-2F, FWS-3D, DOI-2K, MCCA-1C, HUG-2B)*

**6.2.2-B RESPONSE:** See section 7.21 in this FEIS. Please see responses to Comments 6.1.2-B and 6.20.3-A.

**6.2.2-C COMMENT:** *The USEPA has designated the Hackensack Meadowlands as a national priority wetlands site. (DOI-2F, FWS-3D, FWS-4)*

**6.2.2-C RESPONSE:** Comment noted (see Section 7.21). Please also see responses to comments 6.1.2-B and 6.20.3-A.

### **6.2.2.1 History of Wetlands in the Hackensack Meadowlands**

**6.2.2.1-A COMMENT:** *No evidence is presented to demonstrate a change in the vegetation composition of the tract following the installation of tidegates. (WIN-3C)*

**6.2.2.1-A RESPONSE:** Section 6.2 provides a discussion of the historical changes to the Empire Tract that lead to the existing conditions within the region and on the Empire Tract. It is true that the pollen record indicates that common reed was present in the area in the late 1800's, coinciding with the clearing of the cedar swamps. It is also true that tidal restoration projects in the northeastern United States, whether located in coastal or riverine wetlands, have relied upon restoration of tidal flow as a means of controlling common reed and promoting the growth of other species. USACE concludes that the dominance of common reed, an invasive species, on the Empire Tract occurred and continues to occur as a result of historical changes, including the construction of tide gates.

### **6.2.3 Empire Tract**

**6.2.3-A COMMENT:** *The DEIS contains no floristic survey or rare plant survey – studies that are prerequisites to any scientifically sound analysis of wetlands value of the Empire Tract. (ENVCOM-3AA, KIV-1)*

**6.2.3-A RESPONSE:** The DEIS and FEIS provides a summary of a floristic survey of the Empire Tract, which included examination of the site for potential rare plant species. Please see the response to Comment 6.0-A.

**6.2.3-B COMMENT:** *Although litter derived from Phragmites has previously been described as low quality, recent evidence shows that it is quite capable of supporting an active community of decomposer microorganisms. Moreover, studies tracing the movement of reed organic matter through aquatic food webs shows that juvenile fish can in fact derive nutrition from this plant (Wainwright et al. 2000). (ENVCOM-3CC, ENVCOM-3XX)*

**6.2.3-B RESPONSE:** Please see the response to Comment 6.2-F above.

**6.2.3-C COMMENT:** *The Empire Tract is a thriving ecosystem. (ARY-1D, FER-2A, NRPA-1B, RAV-1A)*

**6.2.3-C RESPONSE:** Ecosystem functions on the Empire Tract are described in Section 6.2.

**6.2.3-D COMMENT:** *The Meadowlands provides vital habitats for 265 avian species, and 63 nesting species, including 43 aquatic species. (ARY-1D)*

**6.2.3-D RESPONSE:** Comment noted. Please see the response to Comment 6.1.2-B.



**6.2.3-E COMMENT:** *The Meadowlands is a nursery habitat for 75% for the Mid-Atlantic's commercial fish. (ARY-1D)*

**6.2.3-E RESPONSE:** Please see the response to Comment 6.1.2-B. Without commenter substantiation, the comment is expected to refer to 75% of commercial fish *species*, not 75% of the commercial catch or population of these species.

**6.2.3-F COMMENT:** *There has been an assumption that Phragmites provides poor nutrition though evidence does not support the assumption that detritus from Phragmites leaves is of poorer nutritional quality than that of Spartina. Fell et al., 1998 found that invertebrates in Phragmites marshes were abundant, and killifish moved onto the marsh surface at high tide as they do in Spartina marshes. Wainright et al. (2000) used stable isotopes to determine trophic pathways supporting juvenile killifish, and found that in Spartina-dominated marshes, this plant provides an important base of the food web for the fish, and in Phragmites marshes, this plant played a similar role. This indicates that Phragmites contributes to the food web leading to killifish in ways similar to Spartina. Similarly, Weinstein et al. (2000) found that bay anchovy and white perch had stable isotope signatures indicating a contribution of Phragmites to these migratory fish. (WEI-11B, HAM-3)*

**6.2.3-F RESPONSE:** Please see response to Comment 6.2-F.

**6.2.3-G COMMENT:** *The Empire Tract is not a monoculture stand of common reed; it is a mosaic of reed, salt-marsh cord grass and freshwater plants. (ENVCOM-3AA, KIV-1)*

**6.2.3-G RESPONSE:** Vegetation studies conducted by the applicant and field visits to the Empire Tract by USACE personnel indicate that the majority of the Empire Tract is dominated by a dense expanse of common reed dominated vegetation, although patches of vegetation are present within the site at some locations that may be co-dominated by other species (see Sections 6.2 and 6.5 of the FEIS). Salt marsh cord grass is present in only in small areas (less than three acres) immediately adjacent to the river, seaward of the dikes and tide gates. Figure 6.2-10 in the EIS graphically depicts the extent of the different major vegetation communities identified on the site.

**6.2.3-H COMMENT:** *Phragmites wetlands can provide equivalent or comparable wildlife functions to those dominated by Spartina. (ENVCOM-3CC, DOI-2P, FWS-3I, WEI-11A, WEI-11B, WEI-11D, MAL-1A, WIN-1A, WIN-1C)*

**6.2.3-H RESPONSE:** Please see the response to Comment 6.2-F.

**6.2.3-I COMMENT:** *Only very recently have data been generated on effects of Phragmites on the estuarine ecosystem, on its habitat and trophic value to estuarine animals. A number of recent field studies seem to indicate that nekton use is comparable in Phragmites vs. Spartina marshes. (WEI-11A)*

**6.2.3-I RESPONSE:** Please see the response to Comment 6.2-F.

**6.2.3-J COMMENT:** *The Empire Tract is a vital part of the Meadowlands in need of preservation. (DOI-2O, FWS-3H, ROR-2C, DOI-2DD, FWS-3W, UGA-1A, UGA-2A, HMP-3I)*

**6.2.3-J RESPONSE:** Comment noted. USACE will consider all public and agency comments in conjunction with the analysis of impacts presented in the FEIS in preparing a ROD regarding whether or not to grant a permit for the applicant's proposal. Please see also response to Comment 5.2-A, 5.2-D, and 6.1.1-A.

**6.2.3-K COMMENT:** *The Empire Tract is used by migratory bird populations including the Rough-legged Hawk, Northern Harrier, and the Short-eared Owl. (DOI-2Q, FWS-3J)*

**6.2.3-K RESPONSE:** Sections 6.5 and 6.8 of the DEIS and FEIS discuss the use or potential use of the Empire Tract by these species.

**6.2.3-L COMMENT:** *The wetlands in the area provide high flood storage capacity and reduce flooding potential. (NEU-1B, RAV-1B, HMP-4F, HMP-4G)*

**6.2.3-L RESPONSE:** Please see the response to Comment 6.2.1.2-B.

**6.2.3-M COMMENT:** *The Empire Tract has been a degraded area for years as a result of dumping and flood and mosquito control attempts. (WAG-1B, BC-1F, PLMB14-1B, ED-2C, DRE-1A, MEY-2B)*

**6.2.3-M RESPONSE:** Comment noted. USACE has incorporated information on historical human influence into our assessment of site wetlands, as presented in Section 6.2 of the DEIS and FEIS.

**6.2.3-N COMMENT:** *The applicant claims that the Empire Tract is structurally simple, however there is no data presented by which to interpret this statement in a meaningful*

way. (WIN-3BB, COB-1, LOW-1C, LOW-3A, LOW-4B, MUR-5A, SAN-2A, SHE-2D, TRO-1A, TUS-1B, WEN-1A)

**6.2.3-N RESPONSE:** It appears the comment pertains to habitat heterogeneity associated with different vertical strata (ie., grasses, shrubs, trees). As noted in the DEIS and FEIS, most of the site vegetation is dominated by common reed.

**6.2.3-O COMMENT:** *There is nothing unnatural about the presence of Phragmites on the site. It's been dominating the Meadowlands since the 1800s. (WIN-1D)*

**6.2.3-O RESPONSE:** While common reed may be a natural component of the landscape, the presence of dikes and tide gates on the Empire Tract are not a natural component of the ecosystem. In addition, some genotypes of common reed have rapidly expanded throughout much of the eastern United States, out competing other native species and reducing species diversity in the process. This process is thought to have been facilitated or exacerbated by human disturbance and influence, including diking wetlands for mosquito control. While the verdict may still be out on the exact causes of common reed expansion, it should be noted that state and federal wildlife management agencies have practiced common reed control for decades in order to provide better habitat for waterfowl and other species, and that tidal restoration programs focused on elimination of tidal barriers have successfully improved habitat in the Northeastern United States (see Section 7.2 of the DEIS and FEIS).

#### **6.2.3.2 Wetland Communities and Other Special Aquatic Sites on the Empire Tract**

**6.2.3.2-A COMMENT:** *As tidal restriction can either inhibit, promote, or have no effect on Phragmites populations, there is no reason to assume that Phragmites is a recent component of the Empire Tract. (WIN-3D)*

**6.2.3.2-A RESPONSE:** Please see the response to Comment 6.2.3-O above. Regardless of how the common reed came to be present at the site, several studies cited in Sections 7.4, 7.5 and 7.6 point to the fact that projects that have resulted in restoration of tidal flow have resulted in increased fish and wildlife use of a site wetland.

**6.2.3.2-B COMMENT:** *The vegetation characterization of the Empire Tract is inaccurate*

- *The term "mixed species inclusions" is fundamentally misleading.*

- *Thelypteris thelypteroides* is an incorrect name for *T. palustris*. Because of the extent of this community and the probable ecological importance of mixed reed communities on the site, it is crucial to confirm the identity of, and correctly name, this plant.
- Mixed strands of common reed and a dense, fine-textured, moderately low (ca. 50-70 cm tall), sterile grass that was not *P. virgatum* were noted. *Panicum virgatum* may well be in the area, but the abundant grass seen was not identified in the DEIS despite its local co-dominance. This plant community had openings where common reed was sparse, thus offers a habitat quite different from the dense reed strands on large portions of the site, and this habitat may be of significance for rare plants and animals.
- The applicant maintains that almost 90% of the Empire Tract is dominated by *Phragmites* with sediment salinity  $<0.05$  (pg. 6.5-16). They identify "mixed-species inclusions" in which "other species of plants are found in association with common reed...(which) may be considered remnant habitats of former freshwater marsh vegetation (pg. 6.5-16)." No methods or data are provided to determine the accuracy of these statements.  
(WIN-3F, WIN-3H, WIN-3I)

**6.2.3.2-B RESPONSE:** Please see the response to Comment 6.2-C.

The term "mixed species inclusions" may have been confusing to some readers in the sense that the term "inclusions" are normally referred to as upland areas occurring within a delineated wetland area. The term has been changed to "mixed-species communities", or "plant communities" in the text of the FEIS for clarity.

As noted in the DEIS and FEIS, the description of plant communities on the Empire Tract was based primarily upon vegetation surveys and a review of aerial photography conducted by the applicant.

Lastly, the DEIS conclusion that "other species of plants are found in association with common reed...(which) may be considered remnant habitats of former freshwater marsh vegetation" is a logical deduction drawn from what is known regarding the direction of plant succession in the Meadowlands (see the SAMP DEIS, USACE and USEPA 1995).

**6.2.3.2-C COMMENT:** *The Empire Tract is a riverine brackish marsh, with a hydrology not driven solely by tidal influence. (WIN-3G)*

**6.2.3.2-C RESPONSE:** As indicated in Section 6.2 of the DEIS, the U.S. Fish and Wildlife Service (USFWS) classifies wetlands of the United States. USFWS has classified the wetlands on the Empire Tract as "estuarine emergent", and not "riverine". In the DEIS and FEIS, the wetlands on the Empire Tract have been described as a non-

tidal, brackish emergent marsh with creeks traversing portions of the wetlands (see Section 6.2.3.2 of the EIS). The hydrology of the wetlands on site is no longer driven primarily by the river due to the presence of dikes and gates.

### **6.2.3.3 Wetland Hydrology of the Empire Tract**

**6.2.3.3-A COMMENT:** *A finalized hydrology model is necessary to accurately assess flooding impacts. (NJDEP-1KK)*

**6.2.3.3-A RESPONSE:** Such a model has been prepared for the development alternatives and is summarized in Section 7.13 of the FEIS.

**6.2.3.3-B COMMENT:** *The Empire Tract wetlands provide filtering function of storm water runoff and improve river water quality. (ENVCOM-3QQ, ENVCOM-3RR, VRP-5C)*

**6.2.3.3-B RESPONSE:** The potential ability of the wetlands on the Empire Tract to filter storm water runoff and improve the river water quality was the focus of a water quality study requested by USACE, as discussed in Section 6.2.3.3 of the FEIS.

**6.2.3.3-C COMMENT:** *The occurrence of freshwater species on the Empire Tract indicates the presence of freshwater tidal wetlands. (WIN-3J)*

**6.2.3.3-C RESPONSE:** The Empire Tract has been described as a non-tidal emergent marsh with creeks traversing through portions of the wetlands as presented in Section 6.2.3.2 of the DEIS and FEIS. Freshwater conditions may occur during certain periods of the year within the wetlands west and north of the New Jersey Turnpike. The description of the wetlands as "freshwater tidal wetlands" would be incorrect based upon tidal restriction caused by the placement of berms and tide gates.

**6.2.3.5 Assessment of the Empire Tract Wetland Functions and Values**

**6.2.3.5-A COMMENT:** *The Empire Tract has greater value than other, more pristine wetlands because of its size and location. (DOI-2CC, FWS-3V, DOI-2BB, FWS-3U, CRO-2A, CAM-1B)*

**6.2.3.5-A RESPONSE:** Please see the responses to Comment 6.2-K.

**6.2.3.5-B COMMENT:** *The Empire Tract wetlands fulfill a critical wetlands function, providing open space. (ENVCOM-3TT)*

**6.2.3.5-B RESPONSE:** Please see the response to Comment 6.1.1-A.

**6.2.3.5-C COMMENT:** *The DEIS image of a degraded wetland due to the presence of Phragmites is not accurate. (WIN-3E)*

**6.2.3.5-C RESPONSE:** Please note the word “degraded” is not used in the DEIS text to characterize existing wetlands on site. The term may have been used by the applicant in their documents that were included in the Appendix. Please also see the response to Comment 6.2.3.2-A and 6.2-F.

**6.2.3.5-D COMMENT:** *The applicant selectively confounds the impact of tidal restriction with the impact of vegetation type to create an image of degraded wetland. (WIN-3E)*

**6.2.3.5-D RESPONSE:** Please see the response to Comment 6.2.3.3.2-A. Please note that the DEIS text was prepared by USACE. The Appendices included several documents prepared by the applicant, in which data and analysis were examined and used by USACE. USACE does not necessarily agree with the conclusions drawn by the applicant in these documents.

**6.2.3.5-E COMMENT:** *Wetlands sediments chemically bind heavy metals and contaminants and they detoxify harmful pollutants. (RAV-1C)*

**6.2.3.5-E RESPONSE:** Please see the DEIS and FEIS Section 6.2, which presents a discussion of wetland functions related to sediment removal and toxicant retention.

#### **6.2.3.5.1 Water Quality Improvement Function**

**6.2.3.5.1-A COMMENT:** *Please include the referenced PS&S 2000a and 2000b reports as technical appendices to the DEIS. (NJDEP-1LL)*

**6.2.3.5.1-A RESPONSE:** USACE has not included all referenced reports and studies in the FEIS appendices because of the large volume of such reports and studies. This is consistent with NEPA regulations that an EIS document should not be "encyclopedic". These studies and reports are part of USACE administrative record and can be reviewed upon request.

**6.2.3.5.1-B COMMENT:** *There is no data given to support the claim that the water quality improvement function of the Empire Tract wetlands is limited. The applicant fails to measure, or even mention, several parameters that are of fundamental importance in understanding the role of a marsh in biogeochemical fluxes. Flows of water can be inferred by natural (e.g. C1) or added (e.g. Br) conservative tracers, neither of which are used or discussed. Porewater concentrations of nitrogen, phosphorous, metals, and (to my surprise) salinities are not presented or discussed. No budgets (a consolidated measure of input and output terms) are presented at all, for nutrients, metals, or even water; this, however, does not prevent the applicant from making the unsubstantiated statement that the water quality improvement function of the Empire Tract wetlands is limited (pg. 6.2-21). Where are the data to support this claim? (WIN-30)*

**6.2.3.5.1-B RESPONSE:** The discussion in the DEIS was qualitative and based upon known relationships between the opportunity for wetlands to perform water quality improvement functions and physical characteristics of the wetland. For example, if a wetland is seldom inundated or inundated for a very short period, the same opportunity is not provided for settling for solids as a wetland that is inundated for extended periods.

The water quality improvement function analysis presented in the FEIS builds upon that qualitative assessment by providing site-specific quantitative results of mass balance and other hydrological studies (including a water budget study conducted by the applicant) on the Empire Tract, as summarized in Sections 6.2, 7.2, 6.13, 7.13, and Appendix B. These results were used to derive mitigation ratios based on site wetland functions that form the basis for evaluating whether the acreage of mitigation proposed by the applicant is likely to be sufficient to offset impacts from placement of fill. Because acreage is not the only issue of concern, USACE also evaluated specific components of the mitigation plan design, as presented in Section 8.3 of the FEIS. Please also see the response to Comment 6.1.3.2-B.

#### **6.2.3.5.2 Fish, Wildlife and Aquatic Community Values**

**6.2.3.5.2-A COMMENT:** *Please include the referenced TAMS 1997 report as a technical appendix to the DEIS. (NJDEP-1MM)*

**6.2.3.5.2-A RESPONSE:** Please see the response to Comment 6.2.3.5.1-A.

**6.2.3.5.2-B COMMENT:** *In fact, the buffering effect of the "Empire tract" most likely enhances the (Losen Slote) woods and allows themselves to function as larger habitat. The woods, in turn, enhance the bird diversity at the "Empire tract." This is only one small example of the ecological synergies that will be destroyed by habitat fragmentation. (HMP-3N)*

**6.2.3.5.2-B RESPONSE:** For clarification purposes, the Losen Slote wooded area referenced in the comment is not located on the Empire Tract, but is located in close proximity to the northeastern corner of the site, near Empire Boulevard and State Street. USACE agrees that there is evidence from bird survey results by NJAS and others that the Losen Slote woods may act as a habitat island surrounded by inhospitable developed area, particularly for migrant passerine bird species. The existing undeveloped nature of the Empire Tract could act as a buffer to that habitat island. However, while fragmentation is an issue of concern to USACE (see Sections 7.5, 7.8 and 7.24 of the FEIS), the development footprint proposed under all of the construction alternatives is located at the other end of the Empire Tract, 4800 feet from the Losen Slote woods. The buffering effect within the immediate vicinity of the woods would remain, even in the event that a permit were issued for one of the development proposals evaluated in the FEIS, due to the presence of the mitigation preservation area located next to Losen Slote in that portion of the Empire Tract, as well as the tidal and non-tidal mitigation areas between Losen Slote and the development.

### **6.3 Water Quality**

**6.3-A COMMENT:** *The water quality on site is impaired due to the introduction of polluted stormwater runoff. (DOI-2BBB, FWS-3SS)*

**6.3-A RESPONSE:** Currently, the wetlands on the Empire Tract receive some of their water from storm water runoff from upstream sources in the watershed. Potential impacts on water quality on the wetlands from the development are addressed in Section 7.3 of the FEIS.

#### **6.3.2 Regional Setting**

**6.3.2-A COMMENT:** *The Hackensack wetlands complex is an important estuarine environment that filters toxins and pollutants released into NY and NJ harbors and rivers. (GRA-1B, MIL-4B)*



**6.3.2-A RESPONSE:** Comment noted.

**6.3.2-B COMMENT:** *A current data chart of the improved water quality of the Hackensack River adjacent to the Empire Tract is needed. (ENVCOM-3PP)*

**6.3.2-B RESPONSE:** Sections 6.3 and 7.3 describe in detail the historical and current improvements in water quality to the Hackensack River adjacent to the Empire Tract, as well as the potential impacts of development on water quality. The text states clearly that water quality has improved and a tabular summary is provided; additional charts are unnecessary.

**6.3.2-C COMMENT:** *The relevant and most recent data from the area adjacent to the Empire Tract show that no summer depletion of dissolved oxygen (DO) occurred, heavy metal concentrations were well below criteria limits, and fecal coliform bacteria have shown an overall reduction in concentrations. (ENVCOM-3PP)*

**6.3.2-C RESPONSE:** Comment noted. The improving nature of the water quality of the Hackensack River was discussed in Section 6.3 of the DEIS.

**6.3.3.2 Empire Tract Water Quality Data Summary**

**6.3.3.2-A COMMENT:** *The water quality function of the Empire Tract cannot be determined due to insufficient data. The applicant did not correctly measure fluxes. (WIN-3X, WIN-3K)*

**6.3.3.2-A RESPONSE:** The comment is directed at the DEIS, which included statements to the effect that additional hydrological studies were in progress to address these issues. An analysis of water quality improvement function based on fluxes is summarized in the FEIS, Sections 6.2, 7.2 and Appendix B. The hydrological data collected and related analyses are considered sufficient to form the basis of an EIS analysis and permit decision.

**6.3.3.2-B COMMENT:** *There is an inconsistency in interpretation of data representing tidal creek and river salinities. The salinity data imply a somewhat regular exchange of saline water between the tidal creeks on the Empire Tract and the Hackensack River. The applicant states that variations in tidal creek saltiness may be due to "precipitation events, ....malfunctioning tidegates,....and/or groundwater intrusion (pg. 6.3-12), with no reference to their own diagram (Fig 6.1-5) which suggests subsurface seepage." (WIN-3N)*

**6.3.3.2-B RESPONSE:** As referenced by the commenter, Figure 6.1-5 in the EIS depicts the various aspects of the site hydrologic cycle. Subsurface seepage is depicted as one of those components, along with precipitation, surface runoff, etc. However, this figure does not describe the relative contribution of any of these components to site surface water quality. Subsurface seepage is thought to be minimal due to a confining layer of clay (see Section 6.1 of the DEIS and FEIS), and studies have indicated a minimal influence of tidal inundation on groundwater levels (see Sections 6.1 and 6.2 of the DEIS and FEIS).

As noted in the DEIS, the range of salinity values collected from specific creek locations on the Empire Tract are similar to the range of salinities measured in the Hackensack River. However, salinity values recorded at any particular time in site creeks were not necessarily similar to concurrent values reported in the Hackensack River. Salinity values at the various locations on site creeks and the Hackensack River are influenced by water level, precipitation, and tidal cycle.

Groundwater data have also been collected throughout the Empire Tract. Except for areas in the immediate vicinity of the Hackensack River, these data do not indicate a variation in water levels that would indicate a measurable interaction (through subsurface seepage) with the Hackensack River, although it is possible that groundwater salinity could be affected by water moving laterally into the wetland from the creeks. As noted in the FEIS, some Hackensack River water does enter site creeks through leaking tide gates. This contribution becomes more significant during low creek flow periods and appears to be the primary cause for periodic elevated salinity readings in site creeks.

**6.3.3.2-C COMMENT:** *How does the applicant suppose that tidal creek salinities tend to match river salinities? Why are there no measurements of river salinities below 1 ppt (Table 6.3-3), when every spring this river is dominated by freshwater outflow? (WIN-3N)*

**6.3.3.2-C RESPONSE:** As noted above, the *range* of salinity values reported in site creeks was similar to the *range* of salinity values reported at Station 3 in the Hackensack River. These data indicate that the presence of brackish water is a common occurrence in site creeks as a result of the leaking tide gates allowing the typically saline Hackensack River water to periodically enter site creeks.

As noted in Section 6.3 of the DEIS, freshwater inputs into the Hackensack River comprise a relatively minor portion of the flow into the Hackensack estuary. The Hackensack River tidal prism has been estimated at 13,800 MGD (million gallons/day). This is relatively large compared to the estimated average freshwater inflow of 340 MGD (approximately 2% of total tidal flow). In addition, the seasonal data reported by the HMDC from nearby Hackensack River Stations 2 and 3 generally indicate a range of brackish conditions during the springtime. Springtime (April-June) salinity values reported from 1993 through 2000 at Station 2 ranged from 0.4 to 5.5 ppt. Values

reported at Station 3 during this period ranged from 1.0 to 7.4 ppt. Average springtime salinity values during this period at Stations 2 and 3 were 2.9 ppt and 5.1 ppt, respectively. While it would be expected that temporal reductions in salinity in this portion of the River would accompany significant rain events, spring salinity values in the vicinity of the Empire Tract generally indicate brackish conditions.

**6.3.3.2-D COMMENT:** *In the DEIS (6.2-14) it is stated that the "brackish" areas of the site have salinity greater than 0.5 ppt. Does this refer to mean salinity, maximum salinity, or something else? (KIV-1)*

**6.3.3.2-D RESPONSE:** See Response 6.2-B.

#### **6.3.3.4 Groundwater**

**6.3.3.4-A COMMENT:** *The applicant suggests that ground water inputs are insignificant and that the tidegates prevent all tidal exchange on the Empire Tract. (WIN-3M)*

**6.3.3.4-A RESPONSE:** Groundwater inputs do occur to the Empire Tract hydrology, although they are thought to be limited. Based on a review of data provided by the applicant, including a water budget based on site-specific and other data, precipitation appears to be a primary source of site hydrology, with groundwater inputs a lesser component. Recall from Section 6.13 of the DEIS states that most of the upgradient watershed is developed as impervious cover, and therefore recharge into groundwater is limited upgradient of the site. In addition, the tidal monitoring studies have indicated fluctuation of groundwater occurs only immediately adjacent to the river. Therefore, groundwater inputs do not appear to be a primary source of hydrology. Please also see the response to Comment 6.1.3.2-B above.

Regarding tidal exchange, the tide gates leak regularly, thereby accounting for the variable salinity recorded in site creeks (see Sections 6.1 and 6.2 of the FEIS). Thus, some tidal exchange is evident. However, velocity measurements recorded in the creeks indicate they are fairly stagnant and do not fluctuate vertically like tidal creeks or show regular tidal flow changes. Data from groundwater wells indicate some saline influence that is attributable either to lateral flows from the creeks or residual salinity from past inundation events.

#### **6.3.3.5 Empire Tract Sediment Quality Data Summary**

#### **6.4 Fish and Shellfish**

**6.4-A COMMENT:** *We are particularly concerned with the fisheries information included in the DEIS. The fisheries study completed in the 1980's by the Hackensack Meadowlands Development Commission (HMDC) is outdated and does not characterize adequately fish use of the Hackensack River. Based on recent fisheries survey of Newark Bay, fish abundance in the Hackensack River has increased and diversified as industrial discharge points and combined sewer outfalls have decreased in recent years. The onsite fisheries sampling conducted by the applicant is also inadequate. Limited sampling occurred on the site over a three day period in April 1997. Appropriate sampling should have included several sampling efforts through the year, and should have included stations below the tidegates. (NMFS-1M)*

**6.4-A RESPONSE:** The fisheries information presented in the EIS is based upon site-specific studies and research of the Hackensack River during the 1980s and 1990s. The most recent fish survey of the Empire Tract was performed in 1997, at the request of USACE, and provided additional sampling to confirm previously performed fish studies. USACE considers the fisheries information presented in the FEIS adequate for the evaluation of the potential impacts from this project on fish resources. Given the fact that the majority of the Empire Tract is non-tidal and thus not inundated, fisheries habitat is limited to the on-site creeks (see Section 6.4 of the DEIS and FEIS).

**6.4-B COMMENT:** *Although one study has shown that a *Spartina alterniflora* marsh had greater abundance and diversity of fish than a common reed marsh (Able 2000), and it has been hypothesized that common reed invasion smooths microtopography and makes tidal marshes less suitable as fish habitat (Weinstein and Balletto 1999), studies by Fell et al. (1996, 1998), Rilling et al. (1999), Wainright et al. (in press), and Weinstein et al. (in press) indicate that tidal reed marshes are good fish habitat and that reed contributes substantially to fish food chains in some areas. Comparable research has not been conducted in nontidal reed marshes. (ARY-1D, NMFS-1M, KIB-1B, KIV-1)*

**6.4-B RESPONSE:** Please see the response to Comment 6.2-F.

**6.4-C COMMENT:** *The wetlands and waters are an important habitat for birds and fish. (MCC-1B, KIB-1B)*

**6.4-C RESPONSE:** Comment noted. Sections 6.2, 6.4, 6.5 and 6.8 of the DEIS and FEIS address these issues. Please see also response to Comment 6.1.2-B

**6.4-D COMMENT:** *The site provides nursery habitat for many commercial fish species. (SAL-2C, KIN-1B)*

**6.4-D RESPONSE:** As discussed in Section 6.4 of the DEIS and FEIS, the fish surveys conducted by the applicant indicated primarily freshwater species use the site creeks.

The creeks are tidally restricted by gates that limit the movement of fish between the site and the river. Nursery habitat would be primarily limited to the portion of the site located on the Hackensack River side of the tide gates and dikes, that would be in direct contact with the Hackensack River.

## **6.5 Wildlife**

**6.5-A COMMENT:** *One emphasis in the DEIS concerns the purportedly low diversity and abundance of "wildlife" on the site, and the stated benefits of the proposed mitigation project to "wildlife". Yet the term "wildlife" is ambiguous. On page 6.2-25 and in Appendix B on page 3-13, for the purposes of the IVA, "wildlife" is defined unusually narrowly as "wetland dependent birds." In Appendix M "wildlife" refers to birds. Yet on page 6.5-7, for example, "wildlife" appears to include all vertebrates and by implication (due to a comment on invertebrates on page 6.5-7) possibly some invertebrates as well. Again in Appendix B:4-7, "wildlife" refers to all vertebrates as well as macrobenthic invertebrates, but in B:5-10 "wildlife" includes only ducks and shorebirds. As a result of this ambiguity, it is impossible to confidently interpret many crucial statements in the DEIS. (KIV-1)*

**6.5-A RESPONSE:** The text has been revised within the FEIS to identify specific wildlife species groups of management concern that would be affected by different development alternatives.

**6.5-B COMMENT:** *The DEIS states in many places that the "wildlife" of the site is not normal in diversity or abundance. The mammal, reptile, amphibian, fish, and invertebrate faunas reported in the DEIS are based on very limited and inadequate surveys and are almost certainly not indicative of the true diversity and species composition of the fauna. (KIV-1)*

**6.5-B RESPONSE:** As a point of clarification, the statement that wildlife of the site is "not normal in diversity or abundance" is not made anywhere in the DEIS. Sections 6.5 and 7.5 do make assertions regarding the habitat quality of the project site for different wildlife species groups relative to other sites that are inundated versus those that are not subject to tidal restriction. Please see the response to Comment 6.0-A.

**6.5-C COMMENT:** *Notwithstanding that DEIS Appendix F presents a substantial data set, there are important limitations on the sampling methods that have almost certainly biased the results. (KIV-1, WIN-3AA, WIN-3W)*

**6.5-C RESPONSE:** The avian survey methodology was reviewed by the Federal regulatory agencies prior to implementation, including the U.S. Fish and Wildlife Service. The applicant developed the sampling protocols in accordance with discussions

with Rutgers University faculty. USACE has identified the assumptions of and potential biases associated with censusing in Section 6.5 of the DEIS and FEIS. The survey methodology adopted represents a reasonable and scientifically defensible approach toward assessing existing avian utilization of the Empire Tract.

**6.5-D COMMENT:** *Observations of rare bird species onsite are dismissed as not representing breeding individuals (e.g. pages 1-37 to 1-39). Yet the DEIS does not make a detailed or convincing case that American bittern, northern harrier, king rail, sedge wren, and savannah sparrow do not breed onsite. (KIV-1, DOI-2QQ, DOI-2HH, FWS-3E, FWS-3AA, DOI-2KK, FWS-3DD, DOI-2JJ, FWS-3CC)*

**6.5-D RESPONSE:** The cited comments are from the Appendix text of the avian survey report prepared by the applicant, and do not represent text prepared by USACE. Section 6.5 of the DEIS reports the observations of these species on the Empire Tract and compares them to the New Jersey Breeding Bird Atlas regarding “safe dates” of when these species normally breed within the state. The DEIS also reports the findings of the applicant’s consultant, a Ph.D ornithologist, that no evidence of breeding behavior was observed on the site for these species during the year-long avian study conducted by the applicant. As stated in the DEIS text, USACE draws the inference that while several of these species were reported on the site during the breeding season of the year-long avian survey, there is no evidence that they breed on the site.

**6.5-E COMMENT:** *The information in the DEIS on birds, and even more so on other animals, is not adequate as a basis for land use decisions. (2UC-1B)*

**6.5-E RESPONSE:** Please see the responses to Comments 6.0-A and 6.5-C.

**6.5-F COMMENT:** *There are many errors in the spelling of scientific names of organisms in the DEIS (E.G. 6.5-9, 6.5-19, 6.8-2)(KIV-1).*

**6.5-F RESPONSE:** USACE has reviewed the spelling of scientific names and corrected them as necessary.

**6.5-G COMMENT:** *The site is an important habitat as evidenced by avian diversity. (DOI-2R, FWS-3K, NJAS-1D, NJAS-1E)*

**6.5-G RESPONSE:** Diversity is only one measure to be considered in evaluation of project impacts. Diversity alone cannot be used as an effective measure of the existing “importance” of the site without a detailed knowledge of what species utilize the site and when. For example, as noted in the DEIS, of the many bird species observed during a year long study of the Empire Tract, 11 species were confirmed as breeding on the

Empire Tract; those were all common species within the region. In evaluating impacts to avian species composition from the project alternatives, the DEIS and FEIS addressed not only diversity, but other considerations as well. These included the specific species groups that were most likely to be affected by the fill project, as well as species groups of management priority in the HMD, and the life history characteristics of these groups. Thus, impacts to both breeding and migratory populations of species observed using the site were considered. Although the HMD is located within a major flyway, analysis of the data and site characteristics indicates the Empire Tract is not being used as major stopover point for waterfowl, shorebirds, wading birds, or other species groups of management priority in the HMD. The site provides foraging habitat for Northern harrier and several state threatened species, of which no evidence of breeding was found. These facts must be considered collectively in evaluating impacts from the proposed project, rather than focusing on diversity alone.

**6.5-H COMMENT:** *The wide salinity gradient of the Hackensack River provides opportunity for a wide range of habitat. (DOI-2S, FWS-3L)*

**6.5-H RESPONSE:** Comment noted.

**6.5-I COMMENT:** *Numerous resident and migratory avian species, including State-listed endangered and threatened species, are documented using the Empire Tract. (BIJ-1B, KIB-1B, DOI-2LL, DOI-2QQ, FWS-3E, FWS-3EE, DOI-2HH, FWS-3AA, MAC-2B, DOI-2JJ, FWS-3CC, DOI-2KK, FWS-3DD, ZUC-1B)*

**6.5-I RESPONSE:** Comment noted. Please see responses to Comments 6.5-D and 6.5-G above.

**6.5-J COMMENT:** *The literature documents the value of common reed for birds and fish. (NJAS-1A)*

**6.5-J RESPONSE:** See the response to Comment 6.2-F. In addition, Section 6.5 of the DEIS and FEIS notes the use of common reed habitat by different wildlife species groups.

#### **6.5.2 Regional Setting**

**6.5.2-A COMMENT:** *The area has been designated a key migratory bird corridor by the New Jersey Audubon Society. (DOI-2R, FWS-3K, NJAS-1D, BER-3)*

**6.5.2-A RESPONSE:** This point was acknowledged in the DEIS. Please see the response to Comment 6.5-G. The use of the Empire Tract and Hackensack Meadowlands region by migratory birds is documented in FEIS Section 6.5.

**6.5.2-B COMMENT:** *No attempt is made by the applicant to compare their avian survey data with data for other sites in the Meadowlands. (WIN-3Z)*

**6.5.2-B RESPONSE:** Data from other sites in the Meadowlands (e.g. Mill Creek) were included in the DEIS (see Table 6.5-2 of the DEIS). Such data are limited in nature and have not been collected using the same sampling design or sampling effort as performed on the Empire Tract, making direct comparisons between sites ambiguous. Site-specific data were compared to regional lists in the DEIS (see Section 6.5).

#### **6.5.2.1 Habitat Types of the Hackensack Meadowlands**

**6.5.2.1-A COMMENT:** *Section 6.5.2.1, page 6.5-7: discusses a 14-acre upland wooded area "in the vicinity of Losen Slote, immediately north of the Empire Tract" that "is considered a stopover site for neotropical migrant passerine birds". How will construction and operation of the proposed project impact this site and its using by these migrating birds? (NJDEP-1NN)*

**6.5.2.1-A RESPONSE:** Please see the response to Comment 6.2.3.5.2-B.

#### **6.5.3 Empire Tract**

**6.5.3-A COMMENT:** *The Empire Tract is a large contiguous block of open space, providing important avian habitat. (DOI-2II, FWS-3BB, MCCCCAW-1C, WIN-1B, ROC-1A)*

**6.5.3-A RESPONSE:** Please see responses to Comments 6.1.1-A, 6.2-K, and 6.5-G.

**6.5.3-B COMMENT:** *Phragmites provides cover for wildlife. (BA-1, MAL-1B)*

**6.5.3-B RESPONSE:** See the response to Comments 6.2-F, and 6.2.3-O, and 6.5-J.

#### **6.5.3.2 Wildlife of the Empire Tract**

**6.5.3.2-A COMMENT:** *The assessment of avian diversity on the site is flawed. The applicant "anticipated" and "subsequently found" a low diversity of bird species. It appears that this anticipation has skewed their interpretation of the data collected. On page F:1-15, yellow warbler is said not to be summer-resident on the site, but on page 1-23 Table 1.4-2 lists 51 observations of "summer resident" yellow warbler. The report of Le Conte's sparrow in summer (1-29) is probably erroneous and requires elucidation. There are only 12 accepted records of this species in the state, none in the summer. (KIV-1)*



**6.5.3.2-A RESPONSE:** The commenter is citing text from the applicant's avian study which was included by USACE as an Appendix to the DEIS to illustrate some of the data upon which the DEIS analysis was based. As stated in the cover page to the DEIS Appendices, USACE does not agree with all of the assertions or inclusions in the applicant's study reports. With regard to alleged flaws in the assessment of avian diversity, please refer to the responses to Comments 6.5-C, 6.5-D and 6.5-G. The specific inaccuracies cited from the Avian Survey Report provided by the applicant weigh little bearing on the conclusions that USACE drew from the data in evaluating potential wildlife impacts from the applicant's project proposal.

**6.5.3.2-B COMMENT:** *Of 114 bird species using the site, 56 are species of special emphasis as defined by USFWS. (HMP-3F, HMP-3G)*

**6.5.3.2-B RESPONSE:** Comment noted.

**6.5.3.2-C COMMENT:** *The documented use of the site by wetland birds is overlooked. The applicant claims that "only 33% of the total bird species observed on the site are wetland species" yet that means that nearly 40 species of wetland birds were observed during their survey. Thus, their own data contradicts their statement that "birds associated with estuarine habitats were not commonly observed at the site". The DEIS focuses crucially on "wetland-dependent birds" but the available bird data for the Mills site are inadequate, the field workers did not discover how the rare bird species they observed are using the site, and the DEIS is only telling a small part of the story of the bird fauna onsite. (KIV-1)*

**6.5.3.2-C RESPONSE:** The comment cited is taken from the appendix document prepared by the applicant. Section 6.5 of the DEIS and FEIS present USACE's analysis of impacts to wetland bird species.

**6.5.3.2-D COMMENT:** *Species diversity indicated in the avian survey implies that the site is disproportionately important to the region relative to its land mass. (WIN-3Q)*

**6.5.3.2-D RESPONSE:** The majority of species observed during the avian survey of the Empire Tract are common species found throughout the HMD. The rare species noted there were recorded far less frequently, and are likely to have been recorded because of the size of the tract and the level of sampling effort applied to the avian survey, both of which reflect sampling effect. There is insufficient evidence to conclude that the site is disproportionately important to the region relative to its landmass.

## **6.6    Benthos**

**6.6-A COMMENT:** *I found no reference to mosquitoes, other potential vectors of human disease, or other potential nuisance insects in the DEIS (although "biting midge" [i.e. Ceratopogonidae] larvae are listed with other benthic invertebrates in Table 6.6-2). The Mills site, in its current condition and with the proposed development, has the potential to produce abundant mosquitoes including some of the species suspected as vectors of West Nile virus. Mosquito production could occur in existing or "enhanced" wetlands, as well as in the water that due to the high water table is likely to collect in storm drains and ditches associated with any new development. All land use planning should include consideration of design and management to reduce the production of mosquitoes without the use of pesticides (KIV-1).*

**6.6-A RESPONSE:** The focus in the Benthos section in the DEIS was on macro-invertebrates within and on the wetland substrate. The FEIS has been revised to address mosquito issues. Given the lack of surface water in the wetlands, mosquito larvae were not found in the wetlands (see Section 6.6 of the FEIS). The applicant's design of the enhanced non-tidal wetlands for mitigation does take into account potential mosquito populations and is using an "open marsh water management" technique to allow fish to control mosquito populations in the event that a permit is issued for the project.

#### **6.7.2.2 Site Reconnaissance and Interviews**

**6.7.2.2-A COMMENT:** *Fill on the Project site has not been sampled and tested. Any contaminated material on the project site should be managed pursuant to all applicable State regulations and requirements. (NJDEP-100, LF-10A)*

**6.7.2.2-A RESPONSE:** As indicated in Section 6.7 of the DEIS, the majority of the Empire Tract consists of undeveloped and unfilled wetland areas, and no evidence was found indicating the presence of contamination sources on the site. An approximate 1.3-acre historical fill area is located south of Jomike Court. According to the applicant, in the event of permit issuance, and in the event that any contaminated soils are encountered within this area during construction, soils would be handled according to a Soil Handling Plan to be approved by the NJDEP.

#### **6.7.2.3 Field Reconnaissance of the Site Vicinity**

**6.7.2.3-A COMMENT:** *Development of the wetlands mitigation and stormwater management plans for the proposed project should consider the contaminated J. Landau site in order to avoid increased groundwater flows/contamination impacting the Empire Tract. (NJDEP-1PP)*

**6.7.2.3-A RESPONSE:** USACE is awaiting further information from NJDEP Bureau of Site Remediation regarding the status of the J. Landau site investigation and remediation.

No evidence has been provided to date indicating that the groundwater contamination from the J. Landau site is impacting the Empire Tract.

## **6.8 Endangered and Threatened Species**

**6.8-A COMMENT:** *Habitat fragmentation and loss may adversely impact or eliminate populations of threatened and endangered species. (NJDEP-1V, DOI-2X, FWS-3Q, DOI-2Y, FWS-3R, NYNJBK-1D)*

**6.8-A RESPONSE:** Fragmentation concerns were presented in the DEIS and are discussed further in the FEIS in Sections 7.5, 7.8 and Chapter 8.0. See response to Comment 7.8-B.

**6.8-B COMMENT:** *The Empire Tract has been documented as supporting threatened and endangered species. (ENVCOM-3T, ENVCOM-3U, HMP-4H, HRK-1A, WIN-3T, WIN-3V)*

**6.8-B RESPONSE:** For clarification purposes, USACE points out that the comment refers to state endangered and threatened species since no Federal threatened or endangered species use the site. Sections 6.5, 6.8, 7.5, and 7.8 of the DEIS and FEIS discuss the use of the Empire Tract by these species. Please also see the response to Comments 6.5-D and 6.5-G above.

**6.8-C COMMENT:** *Berry's Creek is an important habitat for migratory avifauna and home to a number of breeding New Jersey threatened and endangered species such as Yellow Crowned Night Heron and Northern Harrier. (DOI-2FF, FWS-3Y, NJCF-1A)*

**6.8-C RESPONSE:** The Lower Berry's Creek area has been considered in discussion of both regional and cumulative impacts of the applicant's development proposals (see Section 7.8 of the FEIS).

**6.8-D COMMENT:** *Of the 250 species of birds noted as occurring within the Hackensack Meadowlands District, 114 have been recorded as using the Empire Tract. This is 45% of the total number of bird species within the whole Meadowlands, on a tract that comprises only 6% of the landmass. The inescapable conclusion from these undisputed data is that this site is disproportionately important to the entire regional ecosystem. See (Tab 1 (Windham Public Comments). The Tract itself supports at least thirteen state-listed endangered and threatened species, including: (1) Cooper's hawk; (2) peregrine falcon; (3) pied-billed grebe; (4) red-shouldered hawk; (5) sedge wren; (6) American bittin; (7) bobolink; (8) great blue heron; (9) northern harrier; (10) osprey; (11) savannah sparrow; (12) yellow-crowned night heron; and (13) least tern. See DEIS 6.8-7: New Jersey Audubon Society, Hackensack River Migratory Bird Report (1997) 11-*

13 (Tab 8). *The Tract likely supports even more endangered and threatened species, like Henslow's sparrow, which were simply not recorded in the deficient DEIS Avian Survey. (ENVCOM-3U)*

**6.8-D RESPONSE:** Please see the response to Comments 6.5-D and 6.5.3.2-D. There is no evidence to suggest that other locations in the HMD do not support a similar species diversity that would be measured if they were sampled at a similar intensity.

#### **6.8.2.2 New Jersey State Threatened and Endangered Species**

**6.8.2.2-A COMMENT:** *More detailed studies are needed for the use of the site by Northern harriers, and the potential adverse impacts of the project. (NJDEP-1QQ)*

**6.8.2.2-A RESPONSE:** Additional analysis of potential effects to this species has been included in Section 7.8 of the FEIS. Additional field studies were not required of the applicant, as the avian survey, regional records, and the literature on the life history of this species are collectively considered by USACE to provide a sufficient base of information for analysis.

**6.8.2.2-B COMMENT:** *Section 6.8.2.2, page 6.8-3: reports that the Northern harrier (State endangered) was observed a total of 167 times on 48 different days, although no evidence of breeding was observed. Given these large numbers of observations, it appears that the Empire Ltd. Tract is used extensively by this endangered species. Therefore, it may be appropriate to conduct more detailed studies/evaluations of the use of the site by Northern harriers, and the potential adverse impacts resulting from the construction and operation of the proposed project. For example, Section 7.5.2.2.1 (pages 7.5-6 and 7.5-9) notes that, as result of habitat loss and fragmentation, the proposed project could have direct and indirect adverse impacts to Northern harrier (and other State threatened/endangered species). (NJDEP-1QQ)*

**6.8.2.2-B RESPONSE:** Please see the response to Comments 6.8-A, 6.8-B, and 6.8.2.2-A above.

#### **6.9 Critical Habitats and Marine Sanctuaries**

**6.9-A COMMENT:** *Scientific data show that the tract provides critical habitat for a diverse abundance of species. (ENVCOM-3S)*

**6.9-A RESPONSE:** As noted in Section 6.9 of the DEIS, the term "critical habitat" used in this section is a federal regulatory designation to classify and protect the habitats of endangered species. No federally endangered species are known to use the site. Please see the response to Comment 6.5-G.

## 6.10 Aesthetics

**6.10-A COMMENT:** *This area is the only wild and open space in the region. I was flying over the Meadowlands on the way back from the Midwest and it was the only wild and open space for miles around. (GRE-3A, NYNJBK-1F, RPA-1B, SCNJ-2B, CAL-3B, SHE-3H, WHI-5B)*

**6.10-A RESPONSE:** The Empire Tract is part of a larger undeveloped area associated with the Hackensack River, and within the Hackensack Meadowlands District. Within the District, the 592-acre Empire Tract represents approximately 10% of 5,626 acres of existing open space in the HMD. The *Master Plan* and *District Zoning Regulations* currently in place for the Hackensack Meadowlands District, both of which address the provision of open space on a regional basis, have zoned the Empire Tract for development.

**6.10-B COMMENT:** *The tract provides a relaxing vista for Turnpike drivers. (BHA-1C)*

**6.10-B RESPONSE:** See FEIS Section 6.10, paragraph 1, line 4. The Empire Tract is bisected north-south by the New Jersey Turnpike's Western Spur. Views of the Empire Tract are provided from the bridge that carries the New Jersey Turnpike over the Hackensack River, immediately northeast of the site.

## 6.11 Cultural Resources

**6.11-A COMMENT:** *The DEIS has an inadequate description of historic use of water bodies on the site for commercial and recreational navigation. (ED-2F)*

**6.11-A RESPONSE:** Please see FEIS text Section 6.11.1.5 paragraphs 3, 6 and 8.

## 6.13 Flooding, Floodplain Values, and Hydrology

**6.13-A COMMENT:** *The Empire Tract performs a regional flood storage function, thereby reducing flooding of adjacent properties during fluvial storm events. (ENVCOM-3KK, ENVCOM-3LL, ECH-2A, HAL-1B, RAT-2B, VRP-3A)*

**6.13-A RESPONSE:** Section 6.13 of the DEIS and FEIS documents this characteristic of the Empire Tract.

**6.13-B COMMENT:** *Flooding is a commonly occurring major problem in Little Ferry. (STA-3C, LF-3B, FUC-1A, FOR-1, ALL-3, GAM-1, VER-2, KUR-1, RAN-3B, SAN-2E)*

**6.13-B RESPONSE:** Comment noted. Section 6.13 of the DEIS and FEIS discuss the current flooding problems in Little Ferry.

**6.13-C COMMENT:** *The importance of the role of wetlands in the hydrologic cycle is under appreciated but should not be ignored. (DIG-1, VRP-3C)*

**6.13-C RESPONSE:** The DEIS and FEIS discuss the role of the wetlands on the hydrologic cycle in Sections 6.1, 6.2, 6.3, and 6.13. This role is not under appreciated or ignored, as evidenced by passage of the Clean Water Act.

#### **6.13.2 Regional Setting**

**6.13.2-A COMMENT:** *Pumping stations in Little Ferry have been successful in minimizing flooding. (LF-2A, LF-5A)*

**6.13.2-A RESPONSE:** Comment noted.

#### **6.13.3 Empire Tract Hydrology**

**6.13.3-A COMMENT:** *We are getting 200 year and 1,000-year rainstorms in New Jersey. It is clear that your engineers and state engineers are using erroneous and inaccurate calculations of April rain fall in estimating water runoff. A state engineer recently stated he used 7.35 inches of rain as a standard for allowing construction. While we recently had 14 inches of rain in New Jersey and prudent builder takes realistic calculations into account how many inches of rain in New Jersey. (SHE-3E)*

**6.13.3-A RESPONSE:** Comment noted. The applicant has used the appropriate 100-year storm to calculate fluvial amounts for analysis of pre-construction and post-construction potential flooding impacts from the project.

**6.13.3-B COMMENT:** *Although the Empire Tract is in the 100-year floodplain, it functions as if it is within the 10-year floodplain. (NJDEP-1W)*

**6.13.3-B RESPONSE:** Section 6.13 of the DEIS and FEIS discuss the floodplain characteristics of the Empire Tract. As a point of clarification, it is located within the 100-year floodplain for tidal surges in the Hackensack River, and would be flooded from a 10-year or greater tidal storm event due to the limited height of the existing dikes along the river.

## **6.14 Transportation (Roadway System and Mass Transit)**

**6.14-A COMMENT:** *The Hackensack Meadowlands 1990 Transportation Study (HMTS) is outdated and there is no current transportation plan for the Meadowlands. (ENVCOM-3BBBBB)*

**6.14-A RESPONSE:** NJMC has proposed a new Master Roadway Plan, which is described in the FEIS.

### **6.14.2 Field Studies**

**6.14.2-A COMMENT:** *There is insufficient traffic count data, and the A.M. peak hour was not analyzed. These studies were limited in scope and conducted on one or two days, either midweek evening or Saturday. (NJDEP-1RR)*

**6.14.2-A RESPONSE:** Traffic counts have been conducted within the study area in 1991, 1996, 1997 and 1999 for Traffic Impact Studies in support of the development of the Empire Tract. Several locations were counted on multiple occasions by the applicant's consultant and NJDOT and found to be comparable. New updated traffic counts were performed by the applicant's consultant in March 2001 during the Peak AM and PM Highway Hours, the Peak PM Event Hour and the Peak Saturday Hour. These counts were used as the basis for the analysis in the May 2001 TIS. As evidenced by the traffic count data for this project, traffic volumes in the area have remained relatively constant over the last 10 years. Review of the Trip Generation Summary for the project indicates that the Peak PM Highway Hour will generate the most project-related traffic, of the 4 time periods under study. See Response 6.15.1-A.

## **6.15 Traffic**

**6.15-A COMMENT:** *The roadway system in the project area is currently overburdened. (ENVCOM-3CCCCC, HEC-2F, LF-8B, VRP-3E, SMW25-1A, ANL-1, CON-8B, DEB-2B, FRA-4C, JOS-1, LEV-2A, LOW-1A, MEA-1B, PER-2B, POD-1B, RZE-1F, THO-4B)*

**6.15-A RESPONSE:** The traffic impact study for the EIS documents the existing conditions of the roadways in the area.

**6.15-B COMMENT:** *The characterization of current traffic Level of Service conditions is incorrect. (ENVCOM-3CCCCC)*

**6.15-B RESPONSE:** The traffic analysis presented in the DEIS was updated in the FEIS. The characterization of the current LOS is based on traffic volumes developed and analysis performed in accordance with traditional traffic engineering methodologies as recommended by the Institute of Transportation Engineers. Based on the Highway Capacity Software analysis, most locations operate at acceptable Levels of Service during the periods analyzed.

**6.15-C COMMENT:** *Existing traffic volumes and the assumed background growth may not be representative. (HMDC-2M, HMDC-2N, ENVCOM-3HHHHH)*

**6.15-C RESPONSE:** The traffic analysis presented in the DEIS was updated in the FEIS. Updated manual traffic counts were conducted by the applicant's consultant in March 2001 and were utilized in the May 2001 TIS. In addition, the consultant utilized a background growth rate of 0.5 percent per year that is slightly higher than the growth rate currently experienced in the area of the site.

Based on data collected by NJDOT, the volume of traffic increased by approximately 4% between 1988 and 1997 along Route 120. This is further corroborated by the applicant's consultant's 1991, 1996 and 1999 traffic counts. Therefore, a 0.5% per year growth rate was used to project traffic volumes to the design year.

#### **6.15.1 Existing 1999 Peak Hour Determination**

**6.15.1-A COMMENT:** *The identification of the peak traffic period does not appear to be substantiated by empirical data. (NJDEP-ISS)*

**6.15.1-A RESPONSE:** The traffic analysis presented in the DEIS was updated in the FEIS. Please see Section 6.15 of the FEIS for analysis of conditions during the Peak PM Highway Hour, Peak PM Event Hour and the Peak Saturday Hour. To address concerns regarding the interaction between the project and Sports Complex traffic, counts were conducted on days when multiple events were occurring at the Sports Complex.

#### **6.16 Air Quality**

**6.16-A COMMENT:** *Little Ferry today has severe air pollution problems. (STA-3H, GAS-1C)*

**6.16-A RESPONSE:** The current status of air quality in the vicinity of the Project was reviewed for the DEIS, and subsequently updated for the FEIS. Portions of the State of New Jersey have been designated as nonattainment for the carbon monoxide Ambient Air Quality Standards, and the entire State has been designated as nonattainment for the



Ozone Ambient Air Quality Standards. These designations are discussed in Section 6.16 of the FEIS.

#### **6.16.4.1 Predicted Existing Carbon Monoxide Concentrations at Locations Selected for the Meadowlands Mills Alternative**

**6.16.4.1-A COMMENT:** *"CO Assessment", page 6.16-7: to predict the existing, baseline CO conditions in the project area, modeling was performed on the "worst case" intersections. Thus, it is not clear if these existing "worst case" predictions are representative of "average" conditions in the project area. Further, comparing existing "worst case" conditions to projected "worst case" conditions when the proposed project would be operating may serve to underestimate resulting adverse impacts. (NJDEP-1TT)*

**6.16.4.1-A RESPONSE:** Mobile sources air quality dispersion modeling was performed for carbon monoxide (CO) emissions released from traffic at various intersections in the vicinity of the project site. The modeling analyses were performed using USEPA and NJDEP approved models and the procedures based on USEPA and NJDEP on modeling guidelines. Peak hour traffic conditions were simulated to assess the potential worst-case existing and future air quality conditions and impacts, including those conditions directly attributable to future no-build traffic, and project-related traffic. These air quality concentrations were analyzed for comparison with the National and New Jersey Ambient Air Quality Standards (AAQS), which have been established at levels to protect public health and welfare with an adequate margin of safety. All existing and predicted future CO concentrations were less than the applicable Ambient Air Quality Standards. No violations of air quality levels were found in the mobile sources air quality analyses. The CO modeling analyses usually overestimate the air concentrations and potential impacts due to the conservative worst-case assumptions. The same procedures are being utilized by regulatory agencies and have been used on many similar projects. The analyses focus on the peak hour traffic volumes, since it is at these times that maximum traffic, maximum delay, and maximum idling would be expected to occur usually resulting in the highest expected CO concentration impacts. Therefore, the models used as well as the prescribed procedures tend to be conservative (i.e., tend to predict higher concentrations).

#### **6.16.5.1 Transportation Conformity**

**6.16.5.1-A COMMENT:** *Please provide an updated status on the consultations with USEPA and NJDEP regarding Transportation Conformity. (NJDEP-1UU)*

**6.16.5.1-A RESPONSE:** Please see response to Comment 7.16-A.

### **6.17 Human Health**

**6.17-A COMMENT:** *There was a cancer problem in Rutherford with children because of emissions from automobiles. (GAS-1D)*

**6.17-A RESPONSE:** Comment noted.

## **6.18 Socioeconomics**

**6.18-A COMMENT:** *Twenty percent of the Rutherford jobs in the retail survey are unfilled. (RAV-2B)*

**6.18-A RESPONSE:** The retail survey referenced by this commentor was conducted by the applicant on 9/20/00 after publication of the DEIS in July 2000, when New Jersey and national unemployment rates were at approximately four percent. Since then, unemployment levels have increased. In addition, the applicant anticipates that The Mills Corporation's program for training the underemployed for retail careers would create potential retail employees from non-working segments of the population.

## **6.20 Land Use and Zoning**

**6.20-A COMMENT:** *NJ Transit is planning two projects: the West Shore Commuter Rail Project and the extension of the Hudson-Bergen Light Rail System. (NJT-1D)*

**6.20-A RESPONSE:** Please see the FEIS, Sections 6.20.7 and 7.14.1.3, and response to Comment 4.2-C.

### **6.20.3 Coastal Zone Management Plan Consistency Determination**

**6.20.3-A COMMENT:** *Various Federal and State agencies, as well as independent organizations, have created special designations for the Meadowlands wetlands in recognition of the key functions they serve in the Hudson-Raritan Estuary. (ENVCOM-3Y, ENVCOM-2Z, DOI-2V, FWS-3O, ENVCOM-3Z, RPA-1C, SCNJ-2A)*

**6.20.3-A RESPONSE:** USACE is aware of these designations, and they will be considered in making a decision whether to grant or deny a permit. In New Jersey, Coastal Zone Consistency is administered at the state level by NJDEP in consultation with NJMC.

**6.20.3-B COMMENT:** *The long-term recovery and sustainability of the fish and wildlife resources of the Meadowlands largely depends on protecting and restoring large tracts of this coastal wetlands area, as well as successfully managing related factors, such as water quality and competing land uses. (DOI-2U, FWS-3N)*

**6.20.3-B RESPONSE:** See response to comments on Section 7.2 and Chapter 8.0.

**6.20.5 Other Planned Projects**

**6.20.5-A COMMENT:** *Several other projects are currently planned in the HMD so traffic and air quality analyses should also consider cumulative impacts with these planned projects. (NJDEP-1VV)*

**6.20.5-A RESPONSE:** Cumulative impacts of these projects were considered in Sections 7.15 and 7.16 of the DEIS and FEIS.

**6.21 Noise**

**6.21-A COMMENT:** *Figure 6.21-1: appears to actually be Figure 6.21-2; thus, Figure 6.21-1 is missing. (NJDEP-1WW)*

**6.21-A RESPONSE:** Comment noted. A figure identifying the noise monitoring locations for the 2001 noise measurement program is provided as FEIS Figure 6.21-1.

#### 14.4.5 Chapter 7 Comments and Responses

**7.0-A COMMENT:** *The project will have an environmental impact to the area. (ENVCOM-3L, NYAG-1B, VRP-4A, BEA-2C, MCI-1B, POP-2B, WAL-1A, MAR-2B, CHI-1, BRE-1A, MAR-1A, MAC-1, MAY-1, KEN-1B, LIF-1A, ROB-2A, NRPA-1G, GD-1A, GUG-1C, DRE-3B, ZEL-1, WAS-3D, BRU-6D, BRU-7D, FORM-17E, NA-1B, NA-1C, NJSEED-1B, WHI-3A, POL-1B LF-8F, NYNJBK-2F, NRCC-3A, NRCC-4A, DEV-4A, GAS-1A, HOF-2E, HUR-1B, LEV-2C, SHE-3B)*

**7.0-A RESPONSE:** Anticipated environmental impacts from the applicant's development alternatives under consideration (ie., Empire Tract Alternatives D, E, and Revised E) proposals are discussed throughout Chapter 7.0 of the FEIS, as well as the applicant's proposals for mitigation of impacts (see also Chapter 8).

**7.0-B COMMENT:** *Adverse impacts due to pollutant load in non-point source runoff will occur to the wetlands. (NJDEP-1O, FWS-3A)*

**7.0-B RESPONSE:** This comment pertains to a storm water management approach that uses freshwater wetlands for discharges and detention as discussed in Section 7.2 and Chapter 8. The applicant's proposal for Empire Tract Alternative E relies on the use of a 16-acre area of remaining non-tidal wetlands as a detention basin for storm water runoff from the development.

**7.0-C COMMENT:** *The DEIS has insufficient data to properly quantify impacts or provide adequate mitigation. (DOI-2RR, FWS-3II, NJDEP-1R, NMFS-1P, CBBCF-3A, VRP-4B, NRPA-1E, WOR-1B, WAL-4C, WIN-2C, NJDEP-1MMM, NJDEP-1NNN, NJDEP-1OOO, NJDEP-1PPP, NYNJBK-2A, KIV-1)*

**7.0-C RESPONSE:** Please see responses to Comments 2.0-B, 2.0-D, 2.0-M, 6.0-A, 6.1.3.2-A, 6.1.3.2-C, 6.2-E, 6.3.3.2-A, 6.4-A, 6.5-B, 6.5.3.2-C, and 6.14.2-A, 8.3.1-A, 8.2-J, and 8.3.3.1-A, and Sections 6, 7, 8, and Appendix B of the FEIS.

**7.0-D COMMENT:** *As we have stated in our previous comments on the DEIS because the DEIS uses an overly restrictive project purpose to limit the range of alternatives that can be assessed and does not adequately address the issue of avoidance and minimization, the environmental consequences of the various alternatives cannot be fully assessed. (NMFS-1P)*

**7.0-D RESPONSE:** Please see response to Comments 4.3-A, and responses to comments on Chapter 5.0 concerning avoidance and minimization issues.

**7.0-E COMMENT:** *The assessment of impacts to water quality, wetlands functions, and values and fisheries, and the assessment of indirect and cumulative impacts of the environmental consequences of filling the wetlands on the Empire Tract, is based on flawed data and the assumption that the mitigation proposed by the applicant will go forward. Many of the resource agencies involved in the review of the mitigation plan have expressed serious concerns about its adequacy. As a result, the mitigation plan should not be used as the basis for assuming that there will be no adverse effect as a result of either project. (NMFS-1P)*

**7.0-E RESPONSE:** Please see response to Comments 1.0-A, 2.0-B, 2.0-D, 2.0-M, 6.0-A, 6.1.3.2-A, 6.1.3.2-C, 6.2-E, 6.3.3.2-A, 6.4-A, 6.5-B, 6.5.3.2-C, and 8.3.1-A, 8.2-J, and 8.3.3.1-A. Neither the DEIS or FEIS reach the conclusion of no adverse effect resulting from the applicant's mitigation proposals.

**7.0-F COMMENT:** *The Village's objections are directed at four major deficiencies in the DEIS and the application: (1) the inconsistency with federal environmental law and policy; (2) the incompatibility of the Project with principles of sound land use planning; (3) the failure to fully consider the traffic/air quality impacts; and (4) the absence of a complete analysis of the potential flooding-related impacts. (VRP-4B)*

**7.0-F RESPONSE:** Regarding item 1, please see response to Comment 2.0-K, 2.0-M, 2.3-A, and 2.3-D. Regarding item 2, the reader is referred to responses to comments on Sections 6.21 and 7.21. Regarding item 3, traffic and air quality impacts were discussed in Sections 6.15 and 6.17 of the DEIS, and a revised discussion for Empire Tract Alternatives D and E is provided in the same sections of the FEIS. Regarding item 4, Sections 6.13 and 7.13 of the DEIS discussed potential flooding impacts in detail, as do the same sections within the FEIS. Review and analysis of flooding studies was conducted by USACE, and it was concluded that the development alternatives would provide flood storage area and not exacerbate fluvial flooding. Regional flooding from the tidal Hackensack River is currently, and will continue to be, a problem in the future for existing low-lying developed areas in the floodplain that should not be further exacerbated by the applicant's proposals.

**7.0-G COMMENT:** *Overall adverse impacts include increased traffic, increased risk of flooding, increased air, water and noise pollution, decreased open space and the decline of downtown businesses and wildlife populations. (SOD-1A, DAH-1B, LAB-1A, STR-1B, MES-1B, POP-2C, TOM-1B, TOM-1C, CAP-1B, HEC-1A, MAR-6, KIR-1, CAM-1C, BNHC-1B, MAR-1C, DUL-1, MOS-1A, AFF-1A, DOM-1A, WAL-2B, WRI-2B, DAL-1B, ROB-2C, BUC-1B, BOR-1B, KOS-1B, GEM-1B, DET-1B, SCH-5, GUB-1B, KOH-1F, MAN-4C, TRE-1D)*

**7.0-G RESPONSE:** Comment noted. Please refer to the responses provided by USACE regarding individual issues, under each of the sections of the DEIS and FEIS where these issues were evaluated, as well as Chapter 2 of the FEIS.

**7.0-H COMMENT:** *The DEIS should clarify if the wetland habitat that will be filled to accomplish the planned mitigation plan is included in the recognized 206 acres loss. It appears that the wetland fill associated with the mitigation plan is not included in the EIS description. (DOI-2RR, FWS-3II)*

**7.0-H RESPONSE:** The upland islands proposed by the applicant, as part of their mitigation plans, are not considered by USACE to be part of the project fill requirements. Please see the response to Comments 8.1F, 8.1G and 8.2-N.

**7.0-I COMMENT:** *Fire and projected sea level increases should be addressed in the EIS. (RIV-2A, MAU-1A, SH-2C, CIAFL-1A, MAV-2B, RZE-1C, SAN-2B)*

**7.0-I RESPONSE:** Fire protection available for the site following project implementation is described in the FEIS. Section 6.18.2.6 of the FEIS addresses the existing Municipal Fire Departments of the Hackensack Meadowlands District. The Carlstadt Fire Department currently works out of two fire stations and is dispatched by the Carlstadt Police Department. The Carlstadt Fire Department belongs to the South Bergen Mutual Aid Group, which is called when additional personnel and equipment are needed in a fire emergency. The Mutual Aid Group is comprised of 16 municipal fire departments and more than 60 pieces of fire fighting equipment. The issue of flooding is addressed in FEIS Sections 6.13 and 7.13 in this FEIS. It should be noted that sea level rises would also occur under the No-Action Alternative as well.

## **7.1 General Environment/Natural Resources**

**7.1-A COMMENT:** *As the Empire Tract is a critical component of the Meadowlands ecosystem, its development would harm the environment, long-term economic progress, and public health. (DOI-2E, FWS-3C, ARY-1B)*

**7.1-A RESPONSE:** Comment noted. USACE will consider all public and agency comments in conjunction with the analysis of impacts presented in the FEIS in preparing a ROD regarding whether or not to grant a permit for the applicant's proposal.

## **7.2 Wetlands and Other Special Aquatic Sites**

**7.2-A COMMENT:** *The construction alternatives do not fully minimize the loss of wetlands and open space that are scarce in the metropolitan area. (FWS-2C, ENVCOM-*

3E, WIN-3A, ROR-1B, BHA-1A, WEC-1C, ARN-1E, ROB-2B, MON-2A, JOH-2B, FJPR-1, LIA-3, HOR-1, MCCCCAW-1B)

**7.2-A RESPONSE:** Please see responses to comments on Chapter 5, specifically Section 5.5.1.4-A.

**7.2-B COMMENT:** *The construction alternatives fragment the largest remaining contiguous block of wetlands in the area. (FWS-2E, DOI-2OO, FWS-3GG, DOI-2XX, FWS-3OO, KOS-1C, DET-2A, MAR-4A, GUE-2, LAR-1B, KOS-2B, ED-2B, WRI-4B, FWS-3P, FWS-3S, DOI-2Z, ED-1F, HMP-3O, NJAS-2B, NJAS-2G, NYNJBK-1E, BRO-6, SEL-1A)*

**7.2-B RESPONSE:** Please see the response to Comment 6.8-A.

**7.2-C COMMENT:** *Degradation of both preserved and enhanced wetlands will occur due to pollutant loadings from storm water runoff. (NJDEP-1O)*

**7.2-C RESPONSE:** The preserved wetland area is located away from the development and would remain largely unaffected by storm water runoff from the site. The issue of pollutant loadings from storm water runoff entering the enhanced freshwater wetlands is a concern regarding the project and wetland mitigation design as discussed in the DEIS. This issue is further discussed in responses to Comments 8.1-A, 8.1-B, 8.1-D and 8.1-K, as well as Chapter 8 of the FEIS.

**7.2-D COMMENT:** *None of the proposed alternatives contains a mitigation plan that provides adequate compensation for wetland functions expected to be lost as a result of the respective fills. Although the DEIS expresses the applicant's willingness to comply with any mitigation requirements determined to be necessary by the Meadowlands Interagency Mitigation Advisory Council (MIMAC), the DEIS does not identify appropriate measures for mitigation. Therefore, the DEIS does not clearly demonstrate that the proposed alternatives would not have significant and unacceptable adverse impacts to the aquatic ecosystem, much less to an aquatic resource of national importance. (USEPA-1K)*

**7.2-D RESPONSE:** See the response to Comments 8.3.1-A, 8.2-J, and 8.3.3.1-A, and Section 7.2 of the FEIS.

**7.2-E COMMENT:** *The MIMAC developed, with the applicant's participation, scores for the site and its alternatives using the supplemental Indicator Value Assessment (IVA) methodology to attempt to develop an appropriate mitigation ratio to offset all of the foreseeable impacts as a result of the proposed loss of wetlands. Although this ratio is*

*not yet finalized, indications are that it will approach a ratio much higher than the applicant's proposed ratio (approximately 1.2:1). Therefore, the mitigation as proposed, for any of the alternatives, is inadequate to compensate for the wetlands value that would be lost as a result of the proposed fill placement (USEPA-1L).*

**7.2-E RESPONSE:** Please see the responses to Comments 8.1-C and 8.3-A, as well as Chapter 8 and Appendix B of the FEIS.

**7.2-F COMMENT:** *The wetland mitigation plan as presented is inadequate. Issues to be addressed include the need to minimize wetland fill acreage, inconsistencies in the acreage numbers given, water quality and flood flow issues and determination of an appropriate mitigation ratio. (USEPA-1K, USEPA-1P)*

**7.2-F RESPONSE:** USACE has undertaken additional wetland mitigation analysis to address water quality and flood flows issues, as well as the determination of an appropriate mitigation ratio. Please see the responses to Comments for Chapter 8.0, as well as Chapter 8 and Appendix B of the FEIS.

**7.2-G COMMENT:** *Table 7.2-1: why does Alternative D (64 acres) include 42 more acres of upland "Dikes, Roadways, and Vegetated Areas" when compared with Alternative B (22 acres)? A comparison of Figures 5.5-7 and 5.5-9 would appear to indicate similar acreages of roads for these two alternatives. It does not appear that there has been a concerted effort to minimize wetlands fill for "Dikes, Roadways, and Vegetated Areas" in Alternative D. (NJDEP-1YY)*

**7.2-G RESPONSE:** The area of "Dikes, Roadways and Vegetated Areas" in Table 7.2-1 is correct and reflects the addition of 42 acres of fill for roadways associated with Empire Tract Alternatives D and E, consistent with the April 22, 1999 SAMP Federal Register Notice.

**7.2-H COMMENT:** *Tables 7.2-1 and 7.2-2: includes "Uplands Islands within the Wetlands" as part of the wetlands mitigation component. However, since the existing wetlands mitigation area is already existing wetlands, it would appear that these islands could be considered as "wetlands fill", and not counted as part of the "wetlands mitigation" acreage. (NJDEP-1ZZ)*

**7.2-H RESPONSE:** Please see responses to Comments 7.0-H, 8.1F, 8.1G and 8.2-N.

**7.2-I COMMENT:** *Table 7.2-1: the acreage numbers presented in this table for Alternative D are not consistent with those in Figures 7.2-3, 7.3-4, and 7.2-5. (NJDEP-1AAA)*



**7.2-I RESPONSE:** The Alternative D figures listed in Figures 7.2-3, 7.3-4 and 7.2-5 are correct. As a general note, in response to public and agency comments, acreage figures have been checked and where appropriate revised in the FEIS.

**7.2-J COMMENT:** *Table 7.2-2: the "Shallow Water" acreages listed for Alternative D appear to be incorrect. (NJDEP-1BBB)*

**7.2-J RESPONSE:** The Alternative D figures listed in Table 7.2-2 are correct. As a general note, in response to public and agency comments, acreage figures have been checked and where appropriate revised in the FEIS.

**7.2-K COMMENT:** *Page 7.2-18, "Flood Flow Alteration": please include the TAMS 1998 reference as a technical appendix to the DEIS (NJDEP-1CCC).*

**7.2-K RESPONSE:** The referenced document is not included as an appendix to this FEIS, but is available for public review by request from USACE. Updated storm water modeling studies are referenced in the FEIS.

**7.2-L COMMENT:** *Even under the least fill alternative, Alternative D, water quality improvement and flood flow alteration would not be mitigated. See DEIS 7.2-12 (ENVCOM-3SSSS).*

**7.2-L RESPONSE:** The commenter is referring to the IVA analysis presented in the DEIS. While the IVA analysis of flood storage predicted impacts to flood storage function, site-specific engineering studies indicate the proposed storm water management plan would offset project impacts from fluvial flooding. Since publication of the DEIS, further hydrological studies have been completed regarding water quality treatment functions of site wetlands. The resultant analyses, coupled with a review of characteristics of the plan indicate that Empire Tract Alternative D plan would not be sufficient to offset impacts to water quality improvement from placement of fill. USACE finds that Empire Tract Alternative E offers sufficient brackish tidal acreage for mitigation, but USACE still has concerns regarding mitigation plan design. The applicant subsequently revised the plan for Empire Tract Alternative E (see Chapter 8 of this FEIS). USACE believes the revised plan to be an improvement over prior plans in offsetting impacts resulting from placement of fill on 134 acres of the Empire Tract.

### **7.2.1 No-Action Alternative**

**7.2.1-A COMMENT:** *The Meadowlands is an Aquatic Resource of National Importance. (DOI-2NN, FWS-3F)*

**7.2.1-A RESPONSE:** Comment noted.

**7.2.1-B COMMENT:** *The development would have serious regional impacts. (FORM-16B, FORM-17B)*

**7.2.1-B RESPONSE:** The DEIS and FEIS have provided detailed assessment of regional impacts, both positive and negative of Empire Tract Alternatives D, E, and Revised E.

**7.2.1-C COMMENT:** *Even if nothing is done on this site, in the long term it will succeed to another habitat type. (NJAS-1B, DAV-1B)*

**7.2.1-C RESPONSE:** The FEIS considers the No-Action Alternative and concludes that the Empire Tract would likely continue to be dominated by common reed, maintain a non-tidal hydrologic state, and provide wetland functions similar to its present condition in the foreseeable future. Predicting the degree and extent of long term future vegetative succession is difficult on the basis of existing information.

## **7.2.2 Meadowlands Mills Alternative**

**7.2.2-A COMMENT:** *The Mills project will restore, enhance and replenish vital wetlands. (LAH-1B, NJSEED-1C, HH-1B, MRCC-2A, REI-1B, REI-1C, MIZ-1B, RZE-1E, SAN-2F, SEG-1B, SMI-4B)*

**7.2.2-A RESPONSE:** Comment noted. The project impacts as well as the potential benefits to wetland functions and values from the project's wetland mitigation plan are described in detail in DEIS and FEIS Section 7.2 and Chapter 8.

**7.2.2-B COMMENT:** *Wetlands are too valuable to be developed and mitigation will not replace what has been lost. (WHI-1B, KRU-1, CHA-1E, ZED-1B, ARN-1C, FORM-14B, FORM-14C, HAW-1B, HOF-2D, MAC-5B, PAN-2, PFU-1C, TRE-1B)*

**7.2.2-B RESPONSE:** Under Section 404 of the Clean Water Act that regulates placement of fill in wetlands, public and agency perspectives regarding a wetland's value are considered by USACE in determining whether a permit is granted. The goal of a wetland mitigation plan is to provide sufficient gains in wetlands functions and values to meet the Federal policy of "no net loss." In this case, USACE and USEPA identified specific mitigation type and acreage requirements of a wetland mitigation plan that could potentially achieve an acceptable offset of the loss of wetland functions and values from placement of fill. The type and acreage of the wetland mitigation provided for Empire Tract Alternative E, as discussed in Sections 7.2, 8.3, and Appendix B of this FEIS, look

to provide "no net loss" of wildlife habitat, water quality improvements, and social significance functions impacted by placement of fill on 134 acres of the site.

**7.2.2-C COMMENT:** *There appears to be errors in the applicant's estimate of wetlands acreage impacted. (DOI-2B)*

**7.2.2-C RESPONSE:** As a general note, in response to public and agency comments, acreage figures have been checked and where appropriate revised in the FEIS. The acreages presented in Table 5.5-3 and Section 7.2.2 of this FEIS, provide breakdown of these wetland acreage impacts.

#### **7.2.2.1 Regional Setting**

**7.2.2.1-A COMMENT:** *With the Meadowlands as the largest contiguous tract of wetland open space in Northern New Jersey, the mall would destroy an irreplaceable ecosystem. (ENVCOM-3GG, ENVCOM-3HH, ENVCOM-3CCC, ED-2A, CBBCF-1B, MUS-1B, FORM-13B)*

**7.2.2.1-A RESPONSE:** See the response to Comment 6.8-A. Fragmentation effects were considered in Sections 7.2, 7.5, 7.8, 7.24 and Chapter 8 of the FEIS, as well as originally in the DEIS. Public and agency perspectives will be considered by USACE in determining whether a permit is granted for the applicant's proposal.

**7.2.2.1-B COMMENT:** *It is possible that construction of the Meadowlands Mill project would indirectly encourage additional development in the Hackensack Meadowlands, resulting in additional adverse impacts. (NJDEP-1XX)*

**7.2.2.1-B RESPONSE:** It is possible that permit issuance could result in additional regional development. Under NEPA, USACE is required to look at foreseeable impacts. Without precise information on other development proposals that might be generated, analysis of such effects is difficult. Section 7.19 of the FEIS considers potential secondary growth effects. Please also see the response to Comment 7.21-B.

**7.2.2.1-C COMMENT:** *Likewise, it is not clear if construction and operation of the proposed project would have adverse impacts on the three wetlands mitigation projects listed in this section of the DEIS. (NJDEP-1XX)*

**7.2.2.1-C RESPONSE:** The construction and operation of the proposed project is not anticipated to have significant adverse impacts on the three off-site wetland mitigation projects referenced in the DEIS. The closest of these projects is the Marsh Resources site, located east of the Turnpike. The majority of the wetland mitigation activities on the Empire Tract, including grading and plantings, will not adversely affect the Marsh

Resources site since it is on the other side of the New Jersey Turnpike and there are no direct hydrological connections between the projects. The proposed tidal inundation of the lower portion of Bashes Creek could have positive synergistic effects on the last phase of the Marsh Resources mitigation project by reintroducing tidal inundation into the adjoining wetland areas along the Hackensack River.

#### **7.2.2.1.2 Changes in Acreage**

**7.2.2.1.2-A COMMENT:** *Such a loss would greatly contribute to the severe cumulative impacts from both past and pending regional wetlands losses. (ENVCOM-3R)*

**7.2.2.1.2-A RESPONSE:** Cumulative impacts from the applicant's proposal are discussed in Section 7.24 of the FEIS. In assessing cumulative impacts, USACE is limited to reasonably foreseeable future development, given potential difficulties of projecting historical and present trends into the future.

#### **7.2.2.1.3 Changes in Wetland Function on a Regional Scale**

**7.2.2.1.3-A COMMENT:** *The lost functions (i.e. migratory and resident wildlife habitat, flood abatement, contiguity of habitat, plant productivity) of the existing wetlands are not adequately addressed. (WIN-3GG, ZED-1C)*

**7.2.2.1.3-A RESPONSE:** Please see response to Comments 1.0-A, 2.0-B, 2.0-D, 2.0-M, 6.0-A, 6.1.3.2-A, 6.1.3.2-C, 6.2-E, 6.3.3.2-A, 6.4-A, 6.5-B, 6.5.3.2-C. USACE believes that the FEIS adequately addresses these issues under NEPA. This includes potential losses of migratory and resident wildlife habitat (Sections 7.2, 7.5 and 7.8), flood abatement (Section 7.13), contiguity of habitat (Sections 7.5 and 7.8) and plant productivity (Section 7.2) of the existing wetlands on the Empire Tract.

**7.2.2.1.3-B COMMENT:** *Several values exist in wetlands dominated by Phragmites, including flood abatement, food production, and wildlife habitat (e.g., yellow-headed blackbirds), but they are not quantified. Stuart Findlay of the Institute for Ecosystem Studies in Millbrook, NY, has shown that Phragmites detritus is no less suitable as a food source than that of Spartina; in addition, Phragmites stands are more productive of biomass and detritus on a per-acre basis. Hence, marshes dominated by Phragmites can produce more food than those dominated by less-productive species. Birds that use the Phragmites wetland will be negatively affected by habitat area loss due to filling and wholesale conversion of Phragmites wetland to another wetland type. This includes sensitive species of raptors, such as the Northern Harrier, which hunt and feed in Phragmites marshes. Several losses are certain or likely to occur: decreased area of wetlands, decreased contiguity of habitat fragments (increased fragmentation), reduced vascular plant productivity and reduced detritus production (because Phragmites is*

widely acknowledged to be an extremely productive plant species), 335 acres of existing *Phragmites*-dominate wetland would be impacted, and habitat for yellow-headed blackbirds and other valued wildlife would be lost. (ZED-1C)

**7.2.2.1.3-B RESPONSE:** USACE recognizes the functions and values that common reed (*Phragmites australis*) wetlands are capable of providing, and has referenced them in appropriate sections of the DEIS and FEIS. USACE has also recognized the importance of site-specific conditions in modifying the opportunity for wetlands to perform a given function. For example, the literature on wastewater treatment function by wetlands includes several references to the efficiency of common reed beds in processing nutrients and sequestering compounds. However, that literature is based on studies where the opportunity exists for reed to function in that fashion. If flow is restricted to the wetlands by tidal gates and berms, as on the Empire Tract, that opportunity is reduced.

The commenter also states that “*Phragmites detritus is no less suitable as a food source than that of Spartina; in addition, Phragmites stands are more productive of biomass and detritus on a per-acre basis. Hence, marshes dominated by Phragmites can produce more food than those dominated by less-productive species.*” This conclusion may be true, but needs to be evaluated in a site-specific context, such as identifying what species are most likely to use *Phragmites detritus*, and their occurrence on the Empire Tract. The site is inundated very infrequently, and hence production export is most likely to affect species inhabiting site creeks or the Hackensack River. In addition, species actually utilizing the existing biomass of *Phragmites*, such as muskrats that feed on their roots and to a lesser extent their young shoots, have habitat requirements that extend beyond simply food resources (i.e. a preference for inundated habitats has been noted in the HMD).

Common reed may have higher aboveground productivity than *Spartina* or many other species. Nevertheless, a *Spartina* dominated system would be exposed twice daily to tidal inundation, and *Spartina* is thought to decompose more readily than common reed, thereby increasing the opportunity for export. Analyses based on dissolved organic carbon (see Appendix B of the FEIS) indicate there would be a slight net increase in TOC exported from the site; this analysis does not account for any *Phragmites* wrack that might get through the tide gates during severe storm events. The complexity of these factors makes it very difficult to predict whether organic carbon export would increase or decrease under Future Action conditions. However, viewed in a regional context, USACE questions whether production export is limiting in a reach of the river that receives 50 mgd of flows per day from a wastewater treatment plant located just upstream of the Empire Tract. In evaluating project impacts to wildlife, the extent of impacts must be viewed in the context of the wildlife management goals for the region, which is accounted for by analysis of several different species groups of management priority (see Section 7.5 of the FEIS). In addition, fragmentation effects on wildlife were raised as an issue in the DEIS, and remain a concern of USACE with respect to the mitigation plans proposed by the applicant (see Sections 7.5, 7.24 and Chapter 8 of the FEIS).

### **7.2.2.2 Empire Tract**

**7.2.2.2-A COMMENT:** *The applicant fails to directly mention the loss of acreage on the tract as an adverse impact, probably because that is the fundamental loss that cannot be regained through the mitigation. (WIN-3FF)*

**7.2.2.2-A RESPONSE:** Please refer to Section 7.2.2.1.2 of the FEIS "Changes in Acreage". Acreage losses in the DEIS were primarily addressed as a fragmentation issue (see Sections 7.2, 7.5 and Chapter 8.0 of the DEIS). Federal policy on wetlands mitigation seeks a no net loss of wetland functions. The text of the FEIS has been further clarified in Section 7.2.2.1.2 to address this issue and identifies actual acreage losses as an unmitigated impact.

**7.2.2.2-B COMMENT:** *The applicant does not provide a method of quantifying the benefits of mitigation. What species will benefit? How do we know they will benefit? How will these purposed increases in habitat quality offset adverse impacts? (WIN-3FF)*

**7.2.2.2-B RESPONSE:** The specific comment refers more to the analysis of wildlife resources impacts in Sections 7.2 and 7.5. Effects on different species groups were evaluated quantitatively two ways: (1) by IVA analysis of different wildlife species groups, and (2) by assessment of the number of acres of habitat offered by the existing and future site conditions for each species group considered. Appendix B of the FEIS provides the methods USACE has used to determine the acreage of the wetland mitigation requirements for the project. Species that would benefit from tidal restoration include several wildlife species groups of management concern in the Meadowlands. Chapter 8 of the FEIS provides an evaluation of the applicant's proposed mitigation plans.

### **7.2.2.2.3 Impacts on Wetlands Functions and Values**

**7.2.2.2.3-A COMMENT:** *The DEIS notes that there are limitations to the site-specific use of the IVA and that it does not numerically consider a number of additional parameters. (NJDEP-1M, HMPA-1D)*

**7.2.2.2.3-A RESPONSE:** Comment noted. Please see Section 7.2 of the FEIS.

**7.2.2.2.3-B COMMENT:** *Section 7.2.2.2.3 of the DEIS summarizes an evaluation of the proposed mitigation plan for the proposed Meadowlands Mills project and Alternative D using the Indicator Value Assessment (IVA) method (the IVA method was not applied to the other alternatives). The DEIS concludes that most of the wetlands functions and values of interest would decrease in value, and that based on the IVA method, additional wetlands mitigation would be needed. This is particularly critical for the Water Quality*

*Improvement, Juvenile/Forage Fish Habitat, and Floodflow Alteration attributes. The DEIS also notes that there are limitations to the site-specific use of the IVA, and that it does not numerically consider a number of additional parameters (page 7.2-13). However, the parameters identified would tend to further minimize the potential of the proposed mitigation plan to compensate for the proposed wetlands fill. (NJDEP-1M)*

**7.2.2.2.3-B RESPONSE:** USACE disagrees that the additional site-specific information collected would “further minimize the potential of the mitigation plan to fully offset the impacts”. This is clearly not the case for flood storage; IVA calculations indicate a net loss of flood storage function, while site-specific studies indicate the storm water management plan should be sufficient to offset impacts to fluvial flood storage. The site-specific data used to supplement the IVA were very important in determining and examining the potential impacts to water quality improvement functions and wildlife habitat as well. In addition, subsequent analyses have addressed these parameters (see Appendix B of this FEIS).

**7.2.2.2.3-C COMMENT:** *Indicator Value Assessment (IVA) values given in DEIS are not accurate and the calculations are not detailed. There is a net loss of wetland functions and values using the IVA approach. (ENVCOM-3QQQQ, ZED-1F, ZED-1G)*

**7.2.2.2.3-C RESPONSE:** Details of the IVA values and associated calculations were provided in Appendix A of the DEIS. Further details and instructions for use of the IVA method are provided in Appendix A of the FEIS, along with calculations of existing and future conditions for Empire Tract Alternatives D and E. The IVA results do indicate a net loss of water quality improvement and flood storage functions, as well as loss in passerine bird habitat from the applicant’s proposals. This information is supplemented with site-specific information and adjusted for lag time and the future mitigation functional period (ie., ten years) that provides an important supplement to interpretation of the IVA results, and in some cases supercedes the results of the IVA. (Please see the response to Comment 7.2.2.3-B above).

**7.2.2.2.3-D COMMENT:** *Indicator Value Assessment (IVA) calculations are not detailed. Readers are asked to accept the conclusion that water quality will improve by 20% (1.2:1.0 calculation), that habitat will improve by 20% (1.2:1.0) and that social significance will increase by 30% (1.3:1.0). No information is given on how these values were calculated. It is essential that the basis for the calculations be provided, as these represent quantitative targets. Furthermore, the IVA values of the proposed “enhanced wetland” are greatly inflated. The report claims that there will be increased water quality improvement, increased wildlife habitat and increased social value. This conclusion is reached by describing only what is “better”, not what will be lost. For example, the report implies that flood protection will increase, despite the fact that project involves filling within the 100-year flood plan and elimination of 206 acres of wetland that could absorb flood waters. The report implies that recreation will be enhanced, but adding human use does not reduce ecological impacts. (ZED-1F)*

**7.2.2.2.3-D RESPONSE:** Please see the responses to Comments 7.2.2.2.3-B and 7.2.2.2.3-C above.

**7.2.2.2.3-E COMMENT:** *The conclusion that values will increase following the project is based on faulty calculations using the ratios presented in the plan. The plan claims "an overall improvement in the existing wetland values." On the contrary, there will be an overall loss of value calculated using the IVA approach: The 592-acre site is described as having 90% wetlands, which is about 530 acres. If these 530 acres have an IVA of 1.0, then the starting condition  $530 \times 1.0 = 530$  IVA units. After enhancement, 335 acres are claimed to have an IVA of 1.2 to 1.3 (an average of 1.23, if the 3 values are averaged). Thus, the outcome would be  $335 \times 1.23 = 412$  IVA units. The net loss of IVA units = 118. If we gave the enhancement effort the benefit of the doubt and scored the IVA as 1.3, the outcome would be  $335 \times 1.3 = 436$ , and the net loss would still be 94 IVA units. Thus, there is a net loss of wetland functions and values, using the IVA approach. (ZED-1G)*

**7.2.2.2.3-E RESPONSE:** The calculations of the IVA methodology as presented in the DEIS are correct. The commenter does not apply the results or the methodology of the IVA correctly to the evaluation of the loss and gain of wetland functions and values for the project. Please see the response to Comments 7.2.2.2.3-B through D above.

**7.2.2.2.3-F COMMENT:** *These lost functions of existing wetlands are not quantified. I found information that the 335 acres to be enhanced would be sampled for functions, but I found no indication that the 206 acres to be filled would be assessed for functional values. This makes it difficult to predict the net change in wetland value. (ZED-1D)*

**-7.2.2.2.3-F RESPONSE:** The basis for wetland functional and mitigation analysis in the DEIS was the IVA analysis. The analysis in the FEIS incorporates additional information collected by the applicant after publication of the DEIS, and the results of other ongoing studies. Appendix B of the FEIS provides the quantification of functions of the existing wetlands for mitigation purposes. Sections 6.1, 6.2 and 6.3 provide details of the site-specific studies and related analyses that documented the functional level of the existing wetlands on the Empire Tract, those that would be filled and future wetlands that would be restored and enhanced, thereby facilitating an understanding of the net change in wetland functional values from the project.

**7.2.2.2.3-G COMMENT:** *The functional value of the proposed "enhanced wetlands" cannot be predicted from the sparse information provided. The proposed freshwater marsh sounds like it is designed to be a stormwater detention basin. Stormwater is acknowledged as the water source. The "raised wetlands" sound like they are garden elements or sedimentation detention basins. (ZED-1E)*



**7.2.2.2.3-G RESPONSE:** Please see the response to Comment 7.2.2.2.3-F above, as well as responses to Comments 8.1-A, 8.1-B and 8.1-D, and Comments 1.0-A, 2.0-B, 2.0-D, 2.0-M, 6.0-A, 6.1.3.2-A, 6.1.3.2-C, 6.2-E, 6.3.3.2-A, 6.4-A, 6.5-B, and 6.5.3.2-C. Regarding “raised wetlands” these are referred to in the text of the DEIS and FEIS as “upland islands”. Please see responses to Comments 8.1-F and 8.1-G.

**7.2.2.2.3-H COMMENT:** *Instead, the applicant(s) focus on the positive impacts of mitigation (e.g. 7.2-5), but even here, they fail to provide a method of quantifying the benefits. Which species will benefit? How do we know they will benefit? How will these purported increases in habitat quality offset adverse impacts? (WIN-3II)*

**7.2.2.2.3-H RESPONSE:** Section 7.2.5 of the DEIS text, like the rest of the DEIS was prepared by USACE based upon information provided by the applicant. The potential benefits of the wetland mitigation components of the applicant’s proposal are described as part of a balanced approach toward evaluating project impacts; both positive and negative impacts from the projects are also evaluated in the same section, and throughout Chapters 7 and 8, and Appendix B of the FEIS.

Regarding quantification, the acreage of different habitats (and their assumed effect on different species groups) that would be filled, as well as conversion to other acreage under the respective mitigation plans evaluated, is summarized in Sections 7.2 and 7.5 of this FEIS. Not all impacts are readily quantifiable, but the approach taken is sufficient and reasonable as an evaluation of different project alternatives, including the No-Action Alternative. For example, while it is difficult to predict exactly what avian species would benefit and to what degree from the proposed wetland mitigation plan, it is clear that inundation of portions of the site that are presently not subject to daily tidal inundation would result in improvement in benthic resources, as well as fish habitat, which in turn would benefit fish-eating birds. This result is evident from other tidal wetland restoration projects in riverine and coastal habitats throughout the Northeastern United States, and is consistent with ecological principles. NEPA does not require a population level analysis for every species affected by the project in order to evaluate impacts from alternatives. Regarding the question of whether purported benefits would offset impacts, in the event of permit issuance, a sound-monitoring and maintenance program for the wetlands mitigation program would be an essential requirement of any approved project.

**7.2.2.2.3-I COMMENT:** *The current degraded status of the site area is not sufficient reason for development. (CNNJ-1B, WIN-3DD)*

**7.2.2.2.3-I RESPONSE:** Please see the response to Comment 6.2-F.

**7.2.2.2.3-J COMMENT:** *The impact section assumes that the site is currently degraded and that all mitigation measures associated with the development will improve the value of the wetlands and habitat for animals. (WIN-3DD)*

**7.2.2.2.3-J RESPONSE:** Please see the response to Comments 6.2-F and 7.2.2.2.3-H.

**7.2.2.2.4 Temporal Development of Wetlands Functions**

**7.2.2.2.4-A COMMENT:** *Wetlands mitigation activities should precede or be concurrent with construction of the proposed project. (NJDEP-1DDD)*

**7.2.2.2.4-A RESPONSE:** Comment noted. In the event of permit issuance, USACE will require that the wetlands mitigation project proceed prior to or concurrently with the filling of the wetlands to construct the project. The applicant has provided a general construction phasing of the project which calls for starting and completing the wetlands mitigation project as part of Phase 1 of the project (see Chapter 4.0 of the FEIS).

**7.2.2.2.4-B COMMENT:** *Section 7.2.2.2.4, page 7.2-18; why will the brackish component of the wetlands mitigation plan be initiated after completed (SIC) of the freshwater component? (NJDEP-1DDD)*

**7.2.2.2.4-B RESPONSE:** If a permit is issued, the construction phasing of the Empire Tract Alternative E wetland mitigation plan described in the FEIS calls for the initiation of the tidal restoration component of the wetland mitigation plan prior to or concurrently with the start of the filling of the wetlands for the project. See response to Comment 7.2.2.2.4-A.

**7.2.2.2.4-C COMMENT:** *Since the applicant proposes to construct the development in phases, the "short-term" impact could last several years. (WIN-3HH, NMFS-1R)*

**7.2.2.2.4-C RESPONSE:** In the event of permit issuance, the filling of the wetlands at the beginning of Phase 1 of the project would result in the "short-term impacts" from the development described in the DEIS and FEIS as two years in duration or less. Subsequent project activities such as the construction of additional office space in Phase 2 would be performed on already filled areas, and would not be expected to have additional impacts to the remaining wetlands and adjacent areas.

**7.2.2.2.4-D COMMENT:** *They do not spell out the temporal nature of their "short-term" impacts (weeks? months? years?). (WIN-3HH)*

**7.2.2.2.4-D RESPONSE:** The phasing of the construction project is presented in Section 4 of the FEIS. The majority of the short-term impacts of the development would occur during the estimated two years anticipated to fill the wetlands to construct the base for the roadways and development area.

**7.2.2.2.4-E COMMENT:** *The DEIS discussed the impacts to wetlands in terms of the percentage of the total wetlands in the District that would be lost directly. This approach does not address the loss of functions and values and provides little meaningful information. (NMFS-1R)*

**7.2.2.2.4-E RESPONSE:** USACE disagrees with this assertion. Providing the percentage of total wetland loss in the region provides the reader with an understanding of the magnitude of the potential regional impact to remaining wetlands in the HMD. Potential regional impacts on wetland functions are discussed within each section of the DEIS and FEIS pertaining to natural resources.

### **7.3 Water Quality**

**7.3A COMMENT:** *Constructing the proposed project on the Empire Tract will result in increased contaminant loads to an already impacted system, causing degradation of existing water and sediment quality as well as the potential for fish and wildlife exposures that may result in acute or chronic adverse effects. (DOI-2YY, FWS-3PP, DOI-2EEE, FWS-3VV, DOI-2FFF, FWS-3WW, LWVBC-2F)*

**7.3-A RESPONSE:** Please see response to Comments 2.0-E, 2.0-G, 8.1-A, 8.1-B and 8.1-D, and Section 7.3 of the FEIS.

**7.3-B COMMENT:** *Mercury concentrations above guideline levels are explained in the DEIS by statements such as "mercury pollution is widespread in the New York-New Jersey Harbor Estuary" and "the concentrations detected reflect the degraded regional water quality of the lower Hackensack River and Newark Bay" While these statements may be factual, they do nothing to address the potential threat of increased mercury contamination from the project's anticipated storm water runoff. (DOI-2EEE, FWS-3VV)*

**7.3-B RESPONSE:** The comment pertains specifically to existing sediment contamination in creeks on the Empire Tract that is a function of non-point source contamination in runoff from the developed watershed upgradient of the site. Please see the responses to Comments 2.0-G and 7.3-B, and the analysis presented in Section 7.3 of this FEIS.

A major point of the DEIS text on storm water impacts from the applicant's development proposals was that any increases in non-point source pollutants (such as mercury) to the Hackensack River estuary would be greatly exceeded by existing contributions to the estuary, such as mercury contamination within Berry's Creek that has some of the highest mercury contamination levels in sediment recorded in the literature on contaminant effects. The commenters do not indicate whether they feel that an increase in mercury pollution from non-point source runoff would be significant relative to these other

regional inputs. The inputs of mercury (along with other non-point source pollutants) present in storm water runoff from the development are of concern to USACE with respect to the sustainability of the freshwater component of the mitigation plan proposed by the applicant under Empire Tract Alternative D, as well as within the 15-acre detention basin that would be created under Empire Tract Alternative E. These impacts are described in Section 7.3 of this FEIS.

**7.3-C COMMENT:** *Adverse impacts due to pollutant load in non-point source runoff will occur to the wetlands. The DEIS asserts that Mills will be using the remaining common reed wetlands for stormwater management purposes for the development, destroying even more than the 134 acres filled, and the 221 acres razed and regraded for enhancement. (See DEIS 7.5-31) (ENVCOM-3NNN)*

**7.3-C RESPONSE:** Please see the responses to Comments 2.0-G, 7.3-A and 7.3-B above. This comment refers to the design of the Meadowland Mills Alternative. Empire Tract Alternative D and E address these concerns with different storm water management designs.

**7.3-D COMMENT:** *Sediment quality in the Empire Tract was also evaluated in the DEIS, based on various sampling programs conducted in 1984. Sediment collected from several stations in the Empire Tract's three surface water creeks was analyzed for a suite of metals and the results were then compared to literature-based guidelines used to evaluate sediment quality (Long, et al., 1995). Numerous samples had metal concentrations potentially toxic to aquatic biota, including chromium and mercury levels exceeding guideline concentrations. In an apparent effort to minimize the importance of the sediment data, the DEIS presents comparisons with data from other research. Specifically, chromium levels are compared to data from a similar study site in the Meadowlands (Hall and Pulliam, 1995). The DEIS appears to offer the study's conclusion (i.e., tissue uptake of chromium by blue crabs, killifish, and common reed is not significant enough to pose ecological risks) as evidence that chromium contamination in the Empire Tract is of little environmental concern. However, the DEIS should more appropriately point out that the guidelines established in Long et al. (1995) are for benthic community impacts, not tissue uptake by other organisms. The Effects Range Median guideline values are indicative of contaminant concentrations at which adverse impacts were observed in approximately 50% of the studies examined. Adverse impacts at lower trophic levels can mean significantly reduced productivity for the entire aquatic food chain. (DOI-2DDD, FWS-3UU)*

**7.3-D RESPONSE:** No attempt was made to minimize the potential impact of contamination on benthic macroinvertebrate communities. As noted in Section 6.6 of the DEIS, the benthic macroinvertebrate communities within creeks of the Empire Tract have low diversity, which is typical of communities affected by contamination, as evidenced by the following excerpt from that section:

*“ In general, the structure of the benthic invertebrate communities of the Empire Tract and the Hackensack River were similar, although there was a greater abundance of oligochaetes on the Empire Tract. GES reported that all of their sampling stations were strongly dominated by oligochaetes and that there existed a lack of species diversity at each station. The dominance of oligochaetes and chironomids, as well as the low number of other species observed, is indicative of low diversity and possibly impacted habitat.”*

Interpretation of sediment quality data and data on benthic macroinvertebrate community structure both should be interpreted in a regional context.

### **7.3.2 Meadowlands Mills Alternative**

**7.3.2-A COMMENT:** *Under some proposed alternatives, there will be minimal pretreatment in the form of small detention basins. But the DEIS boldly admits that “the runoff volume from a 1-year storm event, a relatively frequent event, uses most of the detention basing storage capacity. As a result, the enhanced freshwater wetlands would perform the majority of the moderate and large-storm attenuation functions; See DEIS 7.13-2 (ENVCOM-3III).*

**7.3.2-A RESPONSE:** Comment noted. The comment refers to an alternative that was not carried through for further analysis in the FEIS. The alternative storm water management plans have evolved using project designs that attempt to minimize and avoid wetland impacts, and increase both the area of mitigation and size of the brackish tidal restoration. Please see responses to Comments 2.0-E, 8.1-A, 8.1-B and 8.1-D.

#### **7.3.2.1 Regional Setting**

**7.3.2.1-A COMMENT:** *How was the estimated 0.77 mgd of wastewater flow estimated? (NJDEP-1EEE)*

**7.3.2.1-A RESPONSE:** As stated in Section 7.23 of the DEIS, the wastewater flow for the project was calculated utilizing criteria based upon facility use (e.g., residential, hotels, restaurants, etc.) adopted by NJDEP in N.J.A.C. 7:14A-23.

**7.3.2.1-B COMMENT:** *In order to evaluate potential site-specific impacts resulting from stormwater runoff, the loadings/water quality information presented should be compared with State Water Quality Standards. (NJDEP-1FFF)*

**7.3.2.1-B RESPONSE:** As described in DEIS Section 7.3.2.1, results of comparing contaminant loadings from a 140-acre Empire Tract development to loadings calculated for SAMP Planning Areas 3, 4 and 5, which total 321 acres and include the Empire Tract,

indicate that storm water loadings from additional impervious cover under Empire Tract Alternatives D and E would result in less than a 0.2 percent increase per parameter over baseline conditions, which is not likely to be a significant influence on Hackensack River water quality. The development alternatives considered in the FEIS are for 134-acre of fill, and hence the above analysis was conservative.

### **7.3.2.2 Empire Tract**

**7.3.2.2-A COMMENT:** *The cumulative stormwater loadings will adversely affect water quality on the Empire Tract and surrounding areas by contributing excess nutrients, sediments and other pollutants, permanently degrading any remaining habitat. (ENVCOM-3F, ENVCOM-3EE, ENVCOM-3KKK, DOI-2CCC, FWS-3TT, KOC-1A, TCBC-1F, NAZ-1A, KOS-1E, SCO-1B, SAN-1A, TSTC-1B, FORM-20G)*

**7.3.2.2.A RESPONSE:** Please see Sections 7.2 and 7.3 of the FEIS, and the response to Comments 2.0-G and 7.2-L above.

**7.3.2.2-B COMMENT:** *The proposed development would add 4,125 gallons of residual oil per year, in addition to significant amounts of ethylene glycol, propylene glycol, cadmium, zinc, copper, lead, nickel, cobalt, iron and nutrients from turf management chemicals to the stormwater load that the Empire Tract is already handling, adjacent to a part of the Hackensack River that has recently won its long struggle back to environmental health. See Peter H. Lehner, et al, Stormwater Strategies: Community Response to Runoff Pollution (May 1999), 32-36 (Tab 18). Reduced wetland acreage will be called upon to treat a larger, dirtier waste stream, leading inevitably to impaired water quality. (ENVCOM-3SS)*

**7.3.2.2-B RESPONSE:** Please see the responses to Comments 2.0-G, 7.3-B and 7.3-C, as well as Sections 7.3 and 8.3 of this FEIS. Key to the issue is the extent to which the existing wetlands function with respect to water quality improvement of the storm water runoff entering the site from the upgradient watershed and from the Hackensack River. Because the site is tidally restricted, the opportunity for existing storm water treatment is limited relative to wetlands that are regularly inundated. The project proposes to use a small wetland area that is inundated more frequently by the storm water.

**7.3.2.2-C COMMENT:** *While it may be correct to conclude that the pollutants associated with this additional runoff may not significantly impact the water quality of the Hackensack River, the Department/Service disagrees with the statement, "Storm water runoff from the project is not expected to significantly impact the water quality of on-site creeks over the long term" (DEIS Section 7.3.2.2). The explanation given for this conclusion, "A storm water management plan will be implemented to control runoff from parking lots and other impervious surfaces, and existing water quality within the creeks is already turbid, is scientifically insufficient to dismiss the potential for additional*

*storm water-carried pollutants to adversely impact fish and wildlife resources. (DOI-2AAA, FWS-3RR)*

**7.3.2.2-C RESPONSE:** USACE has remained this issue and concluded in the FEIS that water quality within the lower portion of Bashes Creek (downstream of the proposed development) could become further degraded over time, since under Empire Tract Alternative E the water from the detention basin would be expelled into the creek and detention basins are not 100% effective at treating storm water runoff.

**7.3.2.2-D COMMENT:** *Direct damage to the Meadowlands ecology will result form the increased use of salts and cinders, which will be deposited in icy weather on the roads, parking lots and highways. This mixture will be washed down the storm drains into the streams and wetlands. The salts will change the chemistry while the cinders will silt the streams and stiffl vegetation. (TCBC-1F)*

**7.3.2.2-D RESPONSE:** Please see the response to Comment 8-L. Roadways and parking areas including the entrance road passing through the tidal mitigation area would require winter maintenance. According to the applicant there are no plans to use cinders during winter maintenance operations. The potential effects of road salt are considered as non-point source runoff; see the responses to Comments 2.0-G, 7.3-B and C above, as well as Section 7.3 and Section 8.3 of the FEIS.

**7.3.2.2-E COMMENT:** *How will the additional runoff from the proposed pavement be handled? Will the water quality in the Hackensack River be degraded by the additional quantity of the storm water runoff from the proposed pavement? Will there be any additional flooding in the area if the project is constructed? Will additional pesticides be sprayed into waterways to protect shoppers from West Nile fever? Will the fertilizer and herbicides applied to landscaping around the mall degrade water quality? (CHA-1F)*

**7.3.2.2-E RESPONSE:** Section 7.3 of this FEIS provides a description of the storm water management plan for each of the alternatives considered. Under Empire Tract Alternative E, the additional runoff from the proposed pavement would be directed to a 15-acre storm water basin where water quality treatment would be provided. Excess water from the basin would then be discharged into Bashes Creek, eventually flowing into the Hackensack River. The difference in water quality within the Hackensack River would not likely be measurable, as described in Section 7.3 of the FEIS and Response 7.3-B.

Engineering analyses indicate that the project is not anticipated to have significant effects on fluvial flooding (see Section 7.13 of the EIS). Mosquito control throughout Bergen County is the responsibility of the Bergen County Mosquito Division and will be conducted directly by that agency, as it deems necessary. According to the applicant, the application of landscape fertilizers or other landscaping chemicals would be conducted

following manufacturers instructions and any guidelines issued by state/local agencies, and limited to landscaped areas around the development.

**7.3.2.2-F COMMENT:** *Contamination of surrounding estuaries due to increased use (12,000 employed people plus visitors to the site 40,000/day), is of concern.: every time it rains anti-freeze over-flow from parked cars oil residue from parking area oil seepage from macadam areas and tar (non-point source pollution) would result in loss of estuary life reversing present clean-up attempts (DEC-1D)*

**7.3.2.2-F RESPONSE:** Please see the responses to Comments 8.1-L, 7.3.2.2-D and 7.3.2.2-E.

**7.3.2.2-G COMMENT:** *I also haven't heard anything either about TMDL, total maximum daily load. (SAV-1)*

**7.3.2.2-G RESPONSE:** State water quality regulations have not established a TMDL for this waterbody.

#### **7.3.4 Empire Tract Alternative D**

**7.3.4-A COMMENT:** *Under Alternative D, the polluted stormwater runoff will not be pre-treated for 1-year storm events and will directly enter the "enhanced" wetlands. (ENVCOM-3JJJ)*

**7.3.4-A RESPONSE:** Comment noted.

##### **7.3.4.1 Regional Setting**

**7.3.4.1-A COMMENT:** *How was the estimated 0.61 mgd of wastewater flow estimated? (NJDEP-1GGG)*

**7.3.4.1-A RESPONSE:** Please see the response to Comment 7.3.2.1-A.

#### **7.4 Fish and Shellfish**

**7.4-A COMMENT:** *The water quality and aquatic resources of the Hackensack River and the Meadowlands will be adversely impacted by the project. (NMFS-1B, CBBCF-1D, ENG-1C)*



**7.4-A RESPONSE:** Please see the responses to Comments 2.0-E and comments on Sections 6.1.3.2-B and 7.3 above.

## **7.5 Wildlife**

**7.5-A COMMENT:** *Development within the Empire Tract would constitute a loss of natural resources that would result in a degraded ecosystem that may not be biologically viable for a large percentage of its indigenous and migratory fauna. (DOI-2WW, FWS-3NN, CRO-1D, JEN-1, FRA-2B, LSEC-1B, GUB-1C, DOI-2PP, FWS-3HH, ALB-2, ZAP-1, BRE-1B, MAN-4J, SHE-3F)*

**7.5-A RESPONSE:** Comment noted. Please see responses to comments on Chapter 8 regarding the sustainability of the wetland mitigation plan and fragmentation of wetland habitat.

**7.5-B COMMENT:** *Table 7.5-1, "Reduction in Habitat Acreage": states that "Achievement of mitigation plan objectives would mitigate loss in habitat acreage for several species groups...". However, for the most part, the identified groups do not appear to currently use the Empire Ltd. parcel to any great extent. (NJDEP-1HHH)*

**7.5-B RESPONSE:** Comment noted. With consensus of MIMAC, USACE is requesting out of kind mitigation. Tidal brackish restoration is considered to be more sustainable and have a higher probability of success at meeting the objectives of the plan compared to freshwater enhancement. In addition, tidal restoration is more consistent with the wildlife management goals for the region. The wetland mitigation plan for Empire Tract Alternative E thus focuses on tidal restoration as the preferred type of mitigation to target certain priority wildlife species groups of concern in the Hackensack Meadowlands.

**7.5-C COMMENT:** *Page 7.5-21, "Reptiles and Amphibians": due to direct impacts, loss of habitat, and the construction of barriers (roads/dikes) to immigration, the DEIS essentially concludes that reptiles will be eliminated from the project site as a result of construction of the proposed project. This lack of reptiles in the wetlands mitigation area indicates that there will be a net loss of wetlands functions and values, and would be a significant adverse impact. To prevent this, it is recommended that the applicant be required to: conduct a detailed study of existing on-site reptile populations (species, numbers, and population structure); capture as many of these resident individuals as possible and either transplant them to another suitable site or maintain and return them to the wetlands mitigation area; and/or otherwise repopulate the mitigation area with suitable numbers of individuals so as to create viable populations of appropriate reptile species (species numbers and population structure may differ from what currently exists on-site, due to changes in habitat types). Note: similar impacts may also occur to*

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*mammals (Table 7.5-1); thus, the above recommendations should also be considered for these species. (NJDEP-1III)*

**7.5-C RESPONSE:** The applicant has performed some studies to document the reptile populations of the site (see DEIS Section 6.5.3.2). With increased focus on brackish tidal mitigation, as recommended by MIMAC, amphibians and reptiles in the region that favor freshwater wetland habitats would be adversely affected, which is an unintended consequence of a plan targeting wildlife species groups of management priority in the HMD.

### **7.5.2 Meadowlands Mills Alternative**

**7.5.2-A COMMENT:** *Development of the site will displace wildlife populations already stressed by habitat loss. (OSC-1A, CAR-1C, DEC-1C, CER-1B, WIN-1F, RIC-1B, FLSP-1C)*

**7.5.2-A RESPONSE:** Comment noted. Section 7.5 of the DEIS identified species that would be directly impacted by placement of fill.

**7.5.2-B COMMENT:** *I live in the heights section of Jersey City. Already we see raccoons and opossums being forced out of their natural habitat and living in our backyards. What considerations are the developers and politicians giving to this problem? (MCN-1C)*

**7.5.2-B RESPONSE:** Wildlife impacts are an important issue discussed and examined in the DEIS and FEIS.

### **7.5.2.3.3 Predicted Effects of Changes in Habitat Acreage and Quality on Wildlife of the Empire Tract**

**7.5.2.3.3-A COMMENT:** *No data is provided to support the conclusion that mitigation will increase the wildlife carrying capacity of the wetlands. (WIN-3NN)*

**7.5.2.3.3-A RESPONSE:** Please see the response to Comment 7.2.2.2.3-H and Appendix B of this FEIS.

**7.5.2.3.3-B COMMENT:** *In Figure 7.5-1, they make the claim that the per acre carrying capacity for many species would be expected to increase. Where is the data or before/after studies to support this conjecture? They do not even offer a habitat analysis*

*for existing acreage to compare with proposed future conditions (e.g. What is K now and what could it be? What limits these species?) Won't increased use of the site by humans negatively affect the secretive bird species? (WIN-3NN)*

**7.5.2.3.3-B RESPONSE:** Please see the response to Comments 7.5.2.3.3-J and 7.2.2.2.3-H. Wildlife habitat analyses are provided in this FEIS, Section 7.2, since the majority of the Empire Tract has been classified as a wetland (see also Appendix B in this FEIS).

#### **7.5.2.4 Long-Term Cumulative Impacts to the Regional Environment**

**7.5.2.4-A COMMENT:** *Section 7.5.2.4.2, page 7.5-23: does not address "long-term cumulative impacts", which should consider potential interactions with other planned and proposed projects in the region. (NJDEP-1KKK, NJDEP-1LLL)*

**7.5.2.4-A RESPONSE:** Please refer to Section 7.24 of the DEIS and FEIS.

**7.5.2.4-B COMMENT:** *Roadways proposed within the wetland mitigation areas will fragment wildlife habitat. Roadways should be designed to reduce fragmentation of habitat. (, ENVCOM-3DD)*

**7.5.2.4-B RESPONSE:** Following the issuance of the DEIS in July 2000, NJMC proposed a new regional transportation network with implications for the roadway plan proposed for the applicant's proposed project. As a result of NJMC's revised transportation plan, consideration of the proposed Route 120B roadway has been removed from the applicant's proposed traffic plan and modifications to Route 120A and associated ramps connecting to the New Jersey Turnpike have been undertaken (i.e., Empire Tract Alternative E). The removal of Route 120 B would result in reduced fragmentation and disturbance of the mitigation area and allow for a larger contiguous area of brackish tidal wetlands. However, as noted in this FEIS the mitigation area would still be fragmented by the entrance road and tidal barrier. Please see responses to Comments 6.8-A, 8.1-N, 8.2-B, 8.2-E, 8.2-K, 8.3-A, 8.3.1-A, and 8.3.3.1-A.

**7.5.2.4-C COMMENT:** *The long-term cumulative impacts, which should consider potential interactions with other planned and proposed projects in the region, are not addressed. (NJDEP-1KKK)*

**7.5.2.4-C RESPONSE:** Please see Section 7.24 of this FEIS.

##### **7.5.2.4.1 Regional Wildlife Management Plan**

**7.5.2.4.1-A COMMENT:** *Since the referenced draft wildlife management plan has not been approved/accepted by any agency, it is not appropriate to use it as a basis of comparison of the proposed project and its mitigation plan. (NJDEP-1JJJ)*

**7.5.2.4.1-A RESPONSE:** The wildlife management plan was finalized in September 2000 by USFWS. USACE considers it is useful in evaluating impacts to fish and wildlife from the development alternatives that regional fish and wildlife management goals be considered.

## **7.7 Resource Contamination/Hazardous Waste Sites**

**7.7-A COMMENT:** *Construction of the project would result in an increase in environmental contamination in the Empire Tract, resulting in increased risk of contaminant exposure to fish and wildlife resources, possibly causing acute or chronic adverse impacts. (FWS-2G, DOI-2ZZ, FWS-3QQ, TOM-1F)*

**7.7-A RESPONSE:** Comment noted. Please see response to Comment 7.3-E.

## **7.8 Endangered and Threatened Species**

**7.8-A COMMENT:** *Development would likely impact the many endangered and threatened species currently supported by the Tract. (ENVCOM-3W, ENVCOM-3JJ, ENVCOM-3VVV, MOY-1A, CRO-1C, ENVCOM-3VVVV)*

**7.8-A RESPONSE:** Please see responses to Comments on Section 6.8. No Federal or state endangered and threatened species have been documented as nesting or breeding on the site. Section 6.8 of the DEIS and FEIS document the use of the Empire Tract by a variety of wildlife species, including observations of some State endangered and threatened species (all of which are birds). Species most at risk from fragmentation and disturbance are avian species with large habitat area requirements. Section 7.8 of the FEIS further discusses these potential impacts.

**7.8-B COMMENT:** *Placing the proposed project on the Empire Tract would fragment the heart of the Meadowlands and would likely extirpate the Northern harrier as a breeding species in the Meadowlands and prevent any future chance for a viable population to reestablish itself in this area. (FWS-3Z, DOI-2VV, DOI-2GG, FWS-3MM, FWS-2F)*

**7.8-B RESPONSE:** Potential impacts to the Northern harrier are discussed in Sections 7.5 and 7.8 of this FEIS. While Northern harriers have been observed on the Empire Tract during the breeding season, potential project impacts on breeding individuals remain unknown and cannot be predicted with certainty.

## **7.8.2 Meadowlands Mills Alternative**

**7.8.2-A COMMENT:** *Given that northern harriers are particularly susceptible to disturbance and require large foraging areas, the proposed development would likely doom the regional population of this State Endangered Species. (ENVCOM-3V, ENVCOM-3X)*

**7.8.2-A RESPONSE:** Please see the response to Comment 7.8-B above.

## **7.10 Aesthetics**

**7.10-A COMMENT:** *The site has important social value by providing open space in a highly urbanized area. This undeveloped Meadowlands expanse provides much needed open space, for the entire metropolitan area. (DOI-2AA, FWS-3T, DOI-2EE, FWS-3X, KRA-1B, DIN-1, WIL-1B, CHA-3B, COX-1A, DIN-2, STR-2, TUC-1, FRA-2A, LIF-1B, STA-1B, GRE-3B, TEN-1B, SAM-1B, CAM-3B, ALL-1C, VIC-1A, WCNH-1D, RAB-1B, CHBCF-1C, FLSP-1B, TUR-2, SBO-2, MIK-1A, BOW-4, STU-1B, DEM-3, CYP-1C, IRI-1, KOS-1I, ZUC-1A, KRA-3D, PEA-1, SCH-6A, TSTC-1C, BUZ-2, CAS-2D, FORM-20B, CIAFL-1B, CIALF-1C, HMPA-1F, HMPA-1H, SCHC-1E, BEC-3B, BRU-5B, CON-8D, DEC-1G, HAW-1A, MAN-4I, MCD-1)*

**7.10-A RESPONSE:** The issue of open space is discussed in Sections 7.10 (Aesthetics) and 7.21 (Land Use and Zoning) of the EIS. As discussed in Section 7.21.2.1 of this FEIS, "open space" is one of the dominant land uses in the District as well as wetlands. The site currently provides open space, but is not publicly accessible. See response to Comments 6.1.1-A, 6.10-A, and 7.21-A.

**7.10-B COMMENT:** *The Meadowlands wetlands provide the public with a naturally beautiful place of recreation, education and interpretation possibilities. (COR-1A, SMO-1A, MEY-1, BCAS-1F, DEB-1B, OUL-1, WIL-2, ROC-1B, MCSPCA-1D, DET-2B, FORM-17F)*

**7.10-B RESPONSE:** Please see response to Comment 7.10-A.

**7.10-C COMMENT:** *The historic navigational waterways of the Meadowlands area should be re-opened. (ED-2G)*

**7.10-C RESPONSE:** Comment noted.

**7.10-D COMMENT:** *Nighttime light pollution should be considered. (KOS-1H)*

**7.10-DRESPONSE:** Lighting for the project would be provided in accordance with NJMC design standards (N.J.A.C. 19:4-6.18(l)) and performance standards regarding glare (N.J.A.C. 19:4-6.9). The potential effects of light pollution on wildlife are discussed with respect to vegetated buffers in Section 8.3 of the FEIS.

### **7.13 Flooding, Floodplain Values and Hydrology**

**7.13-A COMMENT:** *The construction alternatives exacerbate local flooding. (, ENVCOM-3MM, ENVCOM-300, POP-1B, HEC-2B, HEC-2E, TAL-1A, TAL-1C, LF-4A, LF-5B, LF-7B, LF-9B, VR-1B, HMP-4E, ALA-2C, ALB-1B, AMB-2D, PER-2C, SOL-2C, THO-4E)*

**7.13-A RESPONSE:** The alternatives were evaluated for their impact on tidal flooding in the area or fluvial flooding of adjacent properties. The existing flooding characteristics of the Empire Tract and adjacent areas in the region are presented in Section 6.13 of the FEIS. The issues of flooding of adjacent properties and neighboring communities were examined in the DEIS and in supporting documentation. Currently, flooding is a problem in the Hackensack Meadowlands due to historical development in low-lying areas and insufficient protection from high elevation surges in the river. Tidal storm surges that come up the river from Newark Bay can reach up to 8 feet NGVD and higher. Low-lying developed areas located along the river, such as Little Ferry, continue to have flooding problems because the communities were constructed at elevations much lower than the natural elevations of major storm surges in the river.

Several commenters have mentioned that they already have a flooding problem. For example, a Little Ferry representative stated that their town is at elevations ranging from 1 to 5 feet above sea level. Normal mean high tide of the river adjacent to the town is around 3.5 feet NGVD while a 100-year tidal storm is around elevation 8.7 ft NGVD. When a tidal storm in the river exceeds the dikes protecting Little Ferry (approximately elevation 6 ft. NGVD), the town will be flooded by river water. The Little Ferry pump stations are only designed to pump the floodwaters out of the town after it has flooded.

The Empire Tract is located in what is classified by the New Jersey Department of Environmental Protection (NJDEP) as a "tidally influenced" floodplain. The 100-year storm in a tidally influenced floodplain is a coastal storm wherein large volumes of water enter the floodplain from the Atlantic Ocean (flooding condition), that cause tidal water bodies, in this case the Hackensack River and Newark Bay, to rise. Because such an event is not influenced by development in the floodplain, the NJDEP does not regulate the placement of fill in a tidally influenced floodplain for any potential rise in floodwater elevations.

Nevertheless, the FEIS examined potential impacts, if any, that the project would have on a tidal event, and concluded that the project is not expected to result in significant

impacts on regional tidally influenced flooding or flooding on the Empire Tract. Given the existing topography and the flood elevations generated by large coastal storm events, it is anticipated that the project will not have an adverse impact on flooding (see Section 7.13 of the FEIS).

The engineering analysis examination of several of the alternatives used the models recommended by government organizations and is discussed in detail in FEIS Section 7.13. The potential for a fluvial flooding situation was carefully addressed in the design of the project. Fluvial flooding analysis is based upon rain events and considers the potential flooding from storage of water from these rain events in creeks and wetlands within a specific watershed. The Empire Tract receives rainfall runoff from areas of Carlstadt associated with Moonachie Creek and Bashes Creek. This stormwater is temporarily held on the Empire Tract before being released to the Hackensack River through a system of tide gates.

The storm water management plan for the project examined pre-construction and post-construction conditions and provides an engineering design that manages fluvial events so as not to significantly impact adjacent development or cause an unacceptable rise in water upstream of the Empire Tract. In order to allow for substantial restoration of tidal wetlands on-site as part of the wetlands mitigation plan, a pump station is proposed under Empire Tract Alternative E that would provide flood storage management of large fluvial events by pumping excess water to the river (see Section 7.13). The pump station would account for additional runoff volume proposed from the development and minimize flooding to adjacent properties in the Moonachie Creek subbasin during major fluvial events.

**7.13-B COMMENT:** *The applicant needs to address issues of flooding to adjacent properties and the neighboring communities. (JMCORP-1A, VRP-1A, LF-9E, CIALF-1D, MRCC-1D, GAS-1B, HAW-1C, LIS-2C, PET-1, RAM-1, SMI-2, WAG-2A)*

**7.13-B RESPONSE:** See response to Comment 7.13-A.

**7.13-C COMMENT:** *The DEIS acknowledges that flooding has been exacerbated, and that the loss of wetlands has led to the loss of storm flood storage potential. It acknowledges that the Empire Tract will flood during a normal ten-year storm. (NJDEP-1X, NJDEP-1Y)*

**7.13-C RESPONSE:** Comment noted. Please see FEIS Section 7.13 for a comprehensive evaluation of potential flooding on the post-development project site. The Empire Tract will flood during a ten-year or greater coastal storm event due to the elevation of the dike system.

**7.13-D COMMENT:** *The mitigated wetlands are actually the basis for the storm water management plan. (ENVCOM-3DDD)*

**7.13-D RESPONSE:** See the response to Comments 8.1-A, 8.1-B and 8.1-D.

**7.13-E COMMENT:** *Not just the "enhanced" freshwater wetlands will be used as a stormwater management system -- the "enhanced" brackish wetlands will be used to store the runoff that the freshwater wetlands cannot handle. (ENVCOM-3MMM)*

**7.13-E RESPONSE:** See responses to Comments 8.1-A and 8.1-D. As currently exists, stormwater runoff from upstream areas in the Moonachie Creek and Bashes Creek watersheds enters the creeks of the non-tidal wetlands on the Empire Tract, and is then discharged to the Hackensack River through a series of tide gates (see FEIS Section 6.13). The storm water management plan for the project would maintain this current "path" that runoff follows, entering the site from upstream areas, passing through the creeks, and then discharging into the river.

**7.13-F COMMENT:** *Potential flooding impacts cannot be evaluated as not all the data is available. (NJDEP-1AA, NJDEP-1PPP)*

**7.13-F RESPONSE:** Sufficient data and modeling have been prepared to adequately assess the potential flooding impacts of the applicant's proposed project (see Sections 6.13 and 7.13, as well as Appendix D of the DEIS). See response to Comment 7.13-A.

**7.13-G COMMENT:** *Due to the filling of wetlands and the uncertain flood control measures, existing flooding conditions would worsen and property damage incurred during flood events would increase. (VRP-4L)*

**7.13-G RESPONSE:** See Response 7.13-A.

**7.13-H COMMENT:** *The responsibility should be assigned to the permittee for upstream and downstream flood damages. (VRP-4M)*

**7.13-H RESPONSE:** The storm water management plan proposed by the applicant is designed not to increase potential flooding to adjacent properties and upstream properties for major fluvial events in the Moonachie Creek and Bashes Creek watersheds. Flooding due to tidal storm surges in the Hackensack River will not be affected by the project. See Response 7.13-A.



### **7.13.2 Meadowlands Mills Alternative**

**7.13.2-A COMMENT:** *The wetlands act as a form of abatement for flooding and diminished wetlands would increase flooding in the area. (BOW-1B, CNNJ-1F, DEC-1B, JMCORP-3A, LAB-2A, CRO-1B, NAZ-1B, FRA-3, GUG-1A, LAS-1)*

**7.13.2-A RESPONSE:** The storm water management analyses and modeling performed for the project demonstrate that the post-construction condition of the project will not increase the likelihood of flooding of adjacent and upstream properties. The remaining non-tidal wetlands on the Empire Tract will continue to provide flood storage function. See Response 7.13-A.

**7.13.2-B COMMENT:** *The project will cause the return of flooding problems to Little Ferry. (LF-3A, DEL-1A, STA-3D, DEB-1C, SBO-1D, BOL-2, PAR-3, ROS-2B, FLO-1A, DWY-1B, QUI-1, LUH-1, KOS-3, LAN-6, LEN-1B, MON-2B, WEI-5C, ALB-3B, BAR-5B, BAR-6D, MEA-1A)*

**7.13.2-B RESPONSE:** The DEIS concluded that proposed project Meadowlands Mills Alternative and Empire Tract Alternative D would not cause additional flooding problems in Little Ferry. See Response 7.13-A.

**7.13.2-C COMMENT:** *The potential for flooding resulting from this project may adversely impact the nearby riverfront communities. (HMDC-1E, LAB-1C, PER-1B, DEC-1F, HEC-1C, STA-3B, COL-1B, LF-3C, DEL-4E, VRP-2B, LF-2D, SBO-1C, HIN-1C, DAL-2B, DRI-1A, GUR-1, GIL-2B, KOS-2C, SAG-2C, DOA-1, GOO-1B, MCC-4D, BRU-6B, HEN-1, SCA-3, FORM-20F, BOR-1C, BRU-7B)*

**7.13.2-C RESPONSE:** See Responses 7.13-A and 7.13-B.

**7.13.2-D COMMENT:** *In the storm water management plan, flows from larger storms would directly enter the wetlands under all proposed alternatives. It is unclear under both Alternative D and the Mills Alternative whether or not polluted stormwater runoff from the development would also be put into the "preservation areas." (ENVCOM-3EEE, NJDEP-1Z, ENVCOM-3000, SAC-1C)*

**7.13.2-D RESPONSE:** According to plans provided by the applicant, preservation areas are located upgradient of the development footprint and would remain non-tidal systems, so they would remain unaffected by runoff from the development. Please also see Sections 7.2 and 7.3 of the FEIS, and the response to Comments 2.0-G and 7.2-L above.

### **7.13.4 Empire Tract Alternative D**

**7.13.4-A COMMENT:** *HMDC is awaiting the Najarian report regarding flooding impact for the Mills proposal before offering their conclusions. (HMDC-1F)*

**7.13.4-A RESPONSE:** Comment noted.

### **Transportation**

**7.14-A COMMENT:** *HMDC indicated that revisions to the proposed roadways would be needed to reduce impacts to local roads. HMDC provided a conceptual regional plan and indicated the roadwork that would be needed to accommodate the Meadowlands Mills project. (HMDC-2I)*

**7.14-A RESPONSE:** Please see Section 7.15 of the FEIS. The applicant has proposed a transportation plan under Empire Tract Alternative E that was designed by the applicant to conform to the NJMC Master Roadway Plan formulated to address traffic issues. This transportation plan for the project is currently being reviewed by NJMC, NJTA and NJDOT.

**7.14-B COMMENT:** *Please identify these "Key Study Locations" and road "Improvements" on an appropriate figure(s). (NJDEP-1SSS)*

**7.14-B RESPONSE:** A schematic diagram of proposed roadway improvements is provided as FEIS Figure 7.14-1. Future 2003 and 2009 key transportation study locations for Empire Tract Alternative E are provided on FEIS Figure 7.14-2.

**7.14-C COMMENT:** *An independent traffic analysis is necessary. (ENVCOM-3YYYY, HMDC-2W, CCSI-2C)*

**7.14-C RESPONSE:** USACE retained a traffic consultant, the Louis Berger Group, to evaluate the traffic plan and impact study for the project. The plan and study have been reviewed against the requirements set forth in the N.J. Department of Transportation Highway Access Code, as well as applicable requirements of the New Jersey Turnpike Authority, to ensure that appropriate levels of service are being provided on new as well as existing roadways. The findings of the traffic impact study are provided in Section 7.14 of the FEIS. NJMC also hired a traffic consultant, DMJM/Frederick Harris, to assess the adequacy of the NJMC Master Roadway Plan for accommodation of future traffic conditions.

**7.14-D COMMENT:** *Impacts of traffic congestion due to the project on the regional roadway network should be analyzed. (ENVCOM-3EEEE, JMCORP-3B, BC-1D, LAB-2C, BRA-1, TSTC-1D, CZI-1, WRI-5A)*

**7.14-D RESPONSE:** The impacts of traffic from the development have been analyzed in the Traffic Impact Study (TIS), which is summarized in Section 7.14 of the FEIS. Potential traffic impacts to regional roadways including Route 120, Route 17 and the New Jersey Turnpike have been considered and addressed.

**7.14-E COMMENT:** *The DEIS does not address the issue of truck traffic. (ENVCOM-3FFFFF)*

**7.14-E RESPONSE:** Truck traffic is addressed as part of the TIS. The volume of truck traffic included in traffic analyses for the project is identified in the May 31, 2001 *Traffic Impact Study* for Empire Tract Alternative E, prepared by the applicant's consultant, TRC Raymond Keyes Associates.

**7.14-F COMMENT:** *The assumption that relocated Route 120 is going to be constructed by NJDOT cannot be made as this project is being closed-out. (ENVCOM-3GGGGG, HMDC-2K, NJDOT-1A)*

**7.14-F RESPONSE:** Comment noted. Please see FEIS Section 7.15 for a description of the NJMC Master Plan Roadway System for the NJ Route 120 corridor, a portion of which would be implemented, at the applicant's expense, for the project.

**7.14-G COMMENT:** *Proposed roadway improvements are not adequate to mitigate traffic impacts of the project. (ENVCOM-3KKKKK)*

**7.14-G RESPONSE:** Section 7.15 of the FEIS presents a summary of the TIS for the project that concludes the proposed roadway improvements would mitigate for traffic impacts from the project.

**7.14-H COMMENT:** *Alignment and status of light rail lines from the project are in question. If a rail system is not built, the increased traffic must be taken into account. (NJT-1E, WRI-2A, WRI-2C, RPA-2A, DES-1C, FORM-14G, WRI-5B)*

**7.14-H RESPONSE:** The trip generations contained in the May 2001 TIS do not include any transit credits or reductions for the transit project. Please also see response to Comment 4.2-C.

**7.14-I COMMENT:** *The DEIS should do a careful transportation analysis to determine whether the proposed project is feasible without any roadway and ramp improvements. (ED-2O)*

**7.14-I RESPONSE:** Section 7.15 of the FEIS discusses traffic impacts based on an updated traffic analysis that incorporates the new NJMC Master Roadway Plan. The Empire Tract Alternative E was designed by the applicant to be compatible with the HMDC Master Roadway Plan, including roadway and ramp improvements.

**7.14-J COMMENT:** *The burden of responsibility for roadway improvements is in question. (MUR-2, LF-2B, ED-1I, BAR-5A)*

**7.14-J RESPONSE:** The applicant has indicated that it will take financial responsibility for construction and improvement of roadway improvements necessary to allow successful operation of the project, and coordinate planning and ultimately implementation of the transportation plan for the project with NJDOT, NJTA and NJMC in order to ensure that all relevant transportation issues are properly addressed.

#### **7.14.1.2 Proposed Area Highway Improvements**

**7.14.1.2-A COMMENT:** *NJDOT has deactivated the Route 120 Realignment project. (NJDEP-1QQQ)*

**7.14.1.2-A RESPONSE:** See response to Comment 7.14-F.

#### **7.14.2 Meadowlands Mills Alternative**

**7.14.2-A COMMENTS:** *The project will cause adverse impact on the local roads due to an increase in traffic. (NJDEP-1TTT, SIN-2, DWY-1A, MCL-1B, TOM-1D, HEC-1B, CON-3B, TCBC-1E, HMP-4K, HMP-4L, HMP-4M, WRI-5D)*

**7.14.2-A RESPONSE:** The Meadowlands Mills Alternative was not further analyzed in this FEIS (see Chapter 5). As indicated in Section 7.14 of this FEIS, Alternatives D and E will cause adverse impacts on local traffic conditions. These impacts are proposed to be mitigated.

**7.14.2-B COMMENT:** *The development will put a burden on taxpayers because of the necessity of building up the transportation infrastructure, new roads will have to be built and old ones widened and repaired. (TCBC-1G, TCBC-1H, TCBC-1I, ED-2N, ELS-1B, BOR-1D, JMCORP-3F, BAR-6A)*

**7.14.2-B RESPONSE:** Please see response to Comment 7.14-J.

**7.14.2-C COMMENT:** *Truck traffic and truck idling will negatively affect the quality of life of local residents. (GOR-2)*

**7.14.2-C RESPONSE:** The area surrounding the project site is, in large part, used for industrial purposes, which includes warehousing activities. Present industrial uses generate truck traffic on local streets between Route 46 and Paterson Plank Road. Washington Avenue, which runs through Little Ferry, Moonachie and Carlstadt, is the local roadway that experiences the most truck traffic at present. The transportation plan that includes the project is part of a larger regional transportation improvement program. New exits from the New Jersey Turnpike to accommodate both northbound and southbound traffic, would allow trucks to not only travel to the project but also to the surrounding industrial properties. Thus, trucks could use the Turnpike instead of Route 46, Washington Avenue, or other local roads, reducing truck traffic through residential areas.

**7.14.2-D COMMENT:** *The entire region will benefit from the proposed traffic plan which calls for the opening of a new exit to the New Jersey Turnpike north of exit 18W. (NJSEED-1D, CYP-1B, MRCC-1F, RZE-1B)*

**7.14.2-D RESPONSE:** Comment noted. See FEIS Section 7.14 for a description of the proposed transportation improvements.

**7.14.2-E COMMENT:** *No realistic plan (including the proposed turnpike exit) has been developed to handle the increased traffic this new mall would create in a region already experiencing daily congestion. (NRPA-1D, BOH-1B, RAT-2C, ZUC-1C, GUI-1A, SCA-2B, TCBC-1K, CAR-1D, MIL-1B, HEC-2D)*

**7.14.2-E RESPONSE:** Please see response to Comment 7.14-A.

**7.14.2-F COMMENT:** *The traffic and air quality analysis in the DEIS (including that for the "No Action" alternative) should be revisited, assuming the Route 120 re-alignment will not proceed. (HMDC-2S, NJDEP-1RRR, NJDEP-1CC)*

**7.14.2-F RESPONSE:** Subsequent to the initial traffic and air quality analyses conducted for the DEIS, intersections were analyzed with the assumption that the Route 120 project would not go forward. As such, all Levels of Service presented in this FEIS are representative of the future roadway conditions without the NJDOT Route 120 Relocation Project. The May 2001 Traffic Impact Study analyzed the traffic operating conditions with the improvements currently envisioned by NJMC. As presented in Section 7.16 of this FEIS, the air quality analysis also assumes the Route 120 relocation project would not proceed..

### **7.14.2.3 Surface/Mass-Transit Station/Depot Area**

**7.14.2.3-A COMMENT:** *The 13,000 square foot Mass Transit Center should be adequate for the existing and expanded future bus and rail service. (NJT-1A)*

**7.14.2.3-A RESPONSE:** Comment noted. The area of the proposed transit center under Empire Tract Alternatives D and E is 10,000 square feet.

### **7.14.4 Empire Tract Alternative D**

**7.14.4-A COMMENT:** *Without a relocated Route 120, traffic problems exist on several of the mall's access roads. (HMDC-2T)*

**7.14.4-A RESPONSE:** See Response to Comment 7.14-A

### **7.15 Traffic**

**7.15-A COMMENT:** *The construction alternatives will create an unacceptable increase in traffic. (KLE-5, POW-1, BRO-2B, WOO-1B, PAC-1C, CAS-2E, AMB-1 ENVCOM-3ZZZZ, NJCF-1C)*

**7.15-A RESPONSE:** This FEIS evaluated the traffic impacts of the proposed project.

**7.15-B COMMENT:** *HMDC cannot concur in your finding that traffic levels of service resulting from the Mills development on local and major roads are anticipated to remain acceptable. (HMDC-1D,)*

**7.15-B RESPONSE:** This comment from the NJMC was made prior to the development of the NJMC Master Roadway System Plan for the Route 120 corridor. The transportation plan under Empire Tract Alternatives D, E, and Revised E were developed by the applicant to conform to the NJMC Master Roadway System Plan.

**7.15-C COMMENT:** *The Mills Mall will significantly increase traffic on local roads as well as the Turnpike, Route 3 and Route 4-6. Local residents would experience a worsening quality of life by having to negotiate near traffic gridlock conditions created at peak hours seven days a week. (HMDC-2U, FORM-19C, TAL1B, LF-4B, LF-6A, LF-6B, LF-7A, RPA-1F, ALA-2A, ALB-3A, ALB-1A, AMB-2B, BAR-6B, CAM-7B, DEV-3B, DZI-1, HRB-1C, JAC-9A, KIN-1C, KUK-1A, MAN-4E, RIG-1C, THO-4D, WAL-5A, WRI-6)*

**7.15-C RESPONSE:** The May 2001 TIS incorporates several components of the NJMC's Route 120 Master Roadway System Plan into the project's transportation plan,

in order to provide increased capacity on roadways in the vicinity of the site. The additional capacity, if realized, could mitigate the impacts of traffic generated by the project. Under Alternatives D, E, and Revised E access to the project site would be eliminated from Washington Avenue via Jomike Court and Central Boulevard Extension.

Traffic studies were prepared for the project in 1987, 1992, 1997, 1998, 1999, and 2001. A TIS study was prepared to evaluate the project against the backdrop of the currently proposed NJMC Master Roadway System Plan improvements for the Route 120 corridor. The planned improvements would help reduce the impacts on Route 3 and 17 by dispersion of traffic across the multiple lanes per direction along both roadways in the vicinity of the applicant's project site. Traffic associated with events at the New Jersey Sports and Exposition Authority facilities has been addressed in this FEIS (see Section 6.14.2). Underlying traffic volumes were collected when multiple events were taking place and incorporated into the traffic studies.

**7.15-D COMMENT:** *The traffic analysis in the DEIS may severely under-estimate potential traffic volumes and resulting adverse impacts on the transportation system and air quality. (NJDEP-1DD, NJDEP-1UUU, ENVCOM-3DDDDD, CCSI-2B, CCSI-2G, VRP-4J, LF-2C, FORM-20E, HMDC-2R)*

**7.15-D RESPONSE:** Based on data collected by the New Jersey Department of Transportation, the volume of traffic increased by approximately 4% between 1988 and 1997 along Route 120. In 1988, the average annual daily traffic (AADT) was 15,188 vehicles and in 1997, there were 15,768 vehicles. This constitutes an increase of 0.4% per year. This is further verified by TRC 1991 traffic counts when compared with counts at the same locations in 1996 and 1999. To account for further development within the HMD, a 0.5% compounded growth rate was utilized to project traffic volumes to each design year.

**7.15-E COMMENT:** *It appears that different values were used for some of the parameters in the transportation analysis for the various project alternatives. Table 7.15-3: why are the percentage of "Pass-by" trips for the Meadowlands Mills Alternative (30/40%) different from those used for Alternative D (16/6%; Table 7.15-8), particularly since they are both apparently based on the same reference document. (NJDEP-1FF, NJDEP-1WWW)*

**7.15-E RESPONSE:** Section 7.15 of the FEIS is based upon a revised traffic analysis, which assumes common values for parameters used to evaluate alternatives.

**7.15-F COMMENT:** *The traffic analysis needs to be updated (i.e. status of Route 120, peak travel periods, inconsistencies in data for each project alternative). (NJDEP-1XXX, NJDEP-1YYY, NJDOT-1B, HMDC-2L, HMDC-2O, HMDC-2J)*

**7.15-F RESPONSE:** The TIS for the project was updated in May 2001 to reflect the NJMC's Route 120 Master Roadway System Plan (the NJDOT Route 120 Relocation project has been abandoned). The same peak travel periods from previous traffic studies were used. Please see response to Comment 7.14-A.

**7.15.2 Meadowlands Mills Alternatives (206-Acre Fill Alternative)**

**7.15.2-A COMMENT:** *The traffic data is inadequate for an accurate evaluation of the potential impacts. (NMFS-1O, JMCORP-1B, TCBC-1J)*

**7.15.2-A RESPONSE:** The Meadowlands Mills Alternative was eliminated from further consideration in the FEIS, and a revised traffic analysis was conducted for the alternatives described in this FEIS. The traffic impact analysis in this FEIS analyzes the Peak PM Hour, the Peak PM Event hour, and the Peak Saturday and AM Hours; New counts were performed in March 2001 for the study hours. The traffic counts were conducted on days (Saturday, March 17 and Wednesday, March 21, 2001) when multiple events were occurring at the Sports Complex.

**7.15.2-B COMMENT:** *The area roads are currently over-burdened and the traffic from the proposed Mall would only add to the congestion. (DEL-4C, SCH-1A, MCC-1C, MCC-1E, CCSI-1A, VRP-1B, POP-1C, BOW-1D, TSTC-1F, SMO-1B, LEI-1, CHA-3A, BCAS-1E, GRE-2A, BAR-1A, BRU-6E, BRU-7E, KOS-1F, SUL-2, SAG-2B, GUL-1, KRA-3C, WEI-5D, ETZ-1A, CER-1A, MAR-2D, BAS-1B, GIL-2C, LTA-1B, VRP-2A, SBO-1E, CCSI-2E, MEZ-1, AGR-1, COZ-1A, DIM-1B, OSC-1B, LAB-1B, CHA-1C, FER-1C, KRO-1B, LAB-2B, DEL-1A, STA-3E, MOON-1, LEN-1A, MAL-1C, ALA-1A, TER-1, ROS-2A, FLO-1B, FORM-13D, BUC-1C)*

**7.15.2-B RESPONSE:** The FEIS contains analysis of the project's impacts and proposed traffic conditions.

**7.15.2-C COMMENT:** *The other downside to granting this permit is the traffic. Attached is a detailed rebuttal to the traffic studies submitted by Meadowland Mills. To summarize:*

- 1. On the east side of the project the Toll Booth Plaza at 18W in Carlstadt on the New Jersey Turnpike backs up for miles at rush hours, holidays, and sports events.*
- 2. On the west side of this project Route 120 and Washington Avenue become parking lots during sporting events at the Meadowlands in East Rutherford.*
- 3. There is no north entrance to this project from Route 46 except Moonachie Road (one lane in each direction) into Washington Avenue.*
- 4. The secondary road system in the area is just plain inadequate to take on this additional burden. (JMCORP-1B)*



**7.15.2-C RESPONSE:** The May 2001 TIS incorporates NJMC's Route 120 Master Plan, which seeks to increase capacity on roadways in the vicinity of the site. This additional capacity can mitigate the traffic generated by the project. No access to the project would be provided to/from Washington Avenue via Jomike Court and Central Boulevard Extension.

**7.15.2-D COMMENT:** *The mall traffic would cause congestion on the NJ Turnpike. (EAS-1B, BHA-1B)*

**7.15.2-D RESPONSE:** as indicated in this FEIS, the May 2001 Traffic Impact Study indicates that the NJ Turnpike could operate at acceptable Levels of Service with the applicant's project implemented.

**7.15.2-E COMMENT:** *Numerous road capacity increasing projects are necessary to alleviate the projected traffic increase. (TCBC-1B, ED-2M)*

**7.15.2-E RESPONSE:** The EIS presents the applicant's transportation plan that identifies mitigative steps looking to ensure that the project's traffic does not worsen existing levels of service to the area roadways

**7.15.2-F COMMENT:** *Traffic congestion will be especially bad in this area when there is an event scheduled at the Sports Complex. (TAN-1B, BCAS-2E, WHI-2, HMDC-2D, DEL-4B, SHA-1B, LF-1A, MCA-1B, DAL-2C)*

**7.15.2-F RESPONSE:** Please see responses to Comments 7.14-A and 7.15.2-A.

**7.15.2-G COMMENT:** *The construction of the project will not increase traffic congestion. (BC-1E, AFLCIO-2F, HOE-1C)*

**7.15.2-G RESPONSE:** Comment noted. Please see responses to Comments 7.14-A and 7.15.2-A.

**7.15.2-H COMMENT:** *The assumed trip generation rate for the retail entertainment development is underrepresented. (HMDC-2P)*

**7.15.2-H RESPONSE:** The revised traffic analysis in this FEIS utilized revised trip generation rates. The rates for the retail/entertainment uses were calculated based on studies of similar facilities operated by The Mills Corporation, as reported in a November 1993 *ITE Journal* article. The highest rates reported in the article were used to generate trips. For purposes of analysis these rates were increased by ten percent.

**7.15.2-I COMMENT:** *The actual trip generation rate at Meadowlands Mills could exceed the rate in the 1999 Traffic Study, thereby underrepresenting any potential impacts. (HMDC-2Q)*

**7.15.2-I RESPONSE:** Trip generation rates for the May 2001 Traffic Impact Study took steps to ensure that the rates were not underestimated by increasing the rates 10% above the highest rates established for trip generation. See response to Comment 7.15.2-H.

#### **7.15.2.1 Total Peak Hour Trips**

**7.15.2.1-A COMMENT:** *Traffic generation rates may have resulted in a prediction of lower traffic impacts than would actually occur. (NJDEP-1VVV)*

**7.15.2.1-A RESPONSE:** Please see responses to Comments 7.15.2-H and 7.15.2-I.

#### **7.15.2.5 Distribution of Development Traffic**

**7.15.2.5-A COMMENT:** *The trip distribution data used in the 1990 HMDC Traffic Study may be outdated. (NJDEP-1XXX)*

**7.15.2.5-A RESPONSE:** The office and hotel distributions utilized in this FEIS and the May 2001 TIS were based on the results of employee surveys conducted at existing office facilities in the Meadowlands region, as contained in the "Hackensack Meadowlands 1990 Transportation Study" (HMTS). The HMTS is a transportation planning study that includes projections of office/hotel distribution to the Year 2010. The arrival and departure trip for the retail and entertainment components was based upon the applicant's marketing studies for the project.

#### **7.15.4 Empire Tract Alternative D**

**7.15.4-A COMMENT:** *HMDC can not agree with the DEIS traffic evaluation at this time pending consideration of the findings of their consultant. (HMDC-1D)*

**7.15.4-A RESPONSE:** Please see response to Comment 7.15-C.

#### **7.16 Air Quality**

**7.16-A COMMENT:** *Since the project area is classified as moderate nonattainment for CO and severe nonattainment for ozone, a carbon monoxide hot spot analysis needs to be provided. (USEPA-1N)*

**7.16-A RESPONSE:** A microscale hot-spot CO analysis was performed for the 2006 build year. Please see Section 7.16.2.1 of the FEIS.

**7.16-B COMMENT:** *Increased traffic will further degrade air quality in the area. (DOI-2GGG, JMCORP-3C, VRP-4K, KOS-1G, FORM-20D, NYNJ BK-1G)*

**7.16-B RESPONSE:** Modeling analyses of traffic-related emissions associated with the project indicate that the CO National and New Jersey Ambient Air Quality Standards (AAQS) will not be exceeded at the intersections analyzed. Please see FEIS Sections 7.16.2.1 and 7.16.3-1.

#### **7.16.2 Meadowlands Mills Alternative**

**7.16.2-A COMMENT:** *This proposed project area is classified as moderate nonattainment for CO and severe nonattainment for ozone. In order to adequately analyze the impacts of the proposed project, a carbon monoxide hot spot analysis needs to be provided. (USEPA-1N)*

**7.16.2-A RESPONSE:** Please see response to Comment 7.16-A.

**7.16.2-B COMMENT:** *The additional vehicles will be adding to air pollution that often exceeds limits considered unhealthy under the Clean Air Act. (ARY-1E, MCC-1C, VRP-1B, JAC-1A, CHA-1B, DEC-1E, KUS-1B, SMO-1C, HMDC-2V, GRE-2B, BAR-1B, CAM-2B, SBO-1F, CBBCF-1C, DRI-1B, MCL-1C, MEN-3B, MCC-4C, ESP-2, MAN-4G, HMP-4N, NRDC-1C, ALB-3C, AMB-2D, DEV-4B, GAS-1E, GAS-1H, JAC-9B, MEA-1C, SHE-3J, STA-5, TID-1A)*

**7.16.2-B RESPONSE:** Please see response to Comment 7.16-B.

**7.16.2-C COMMENT:** *Increased traffic accidents, wasted time and lost productivity to nearby businesses and the health consequences of increased air pollution and traffic noise will cost local residents millions of dollars per year. (CCSI-1B)*

**7.16.2-C RESPONSE:** Please see the following FEIS Sections for a discussion of existing and future conditions: Sections 6.15 and 7.15 – traffic; Sections 6.18 and 7.19 – socioeconomic; and Section 7.18 – human health.

**7.16.2-D COMMENT:** *According to the DEIS the Meadowlands Mills preferred alternative has a much higher rate of air pollution on all studied intersections than the No-Action alternative. (TSTC-1G)*

**7.16.2-D RESPONSE:** Please see responses to comments 7.15.2-A and 7.16-B.

### **7.16.2.3 Clean Air Act General Conformity**

**7.16.2.3-A COMMENT:** *The emissions from the trucks transporting the fill to the project site should also be included in the emissions analysis. (NJDEP-1GG)*

**7.16.2.3-A RESPONSE:** Indirect emissions generated during wetlands filling operations, from trucks transporting soil to the Empire Tract and from construction employees' commuting vehicles, would not be included in the general conformity determination, as USACE does not regulate these activities and a permit, if issued, would not contain conditions that provide USACE with the ability to control those emissions. The vehicles and trucks activities on the roadways are part of regional transportation emissions included in the MPO's conformity evaluation, which includes the overall traffic growth on these roadways. Guidance from USACE regulations concerning the calculation of emissions from the placement of fill requires the analysis to consider only the movement of trucks and other equipment on the site for the placement of fill.

**7.16.2.3-B COMMENT:** *All three Meadowlands Mills alternatives exceed the minimum criteria for NO<sub>x</sub> under the General Conformity Rule. (TSTC-1H)*

**7.16.2.3-B RESPONSE:** Please see FEIS Section 7.16.2-3. The construction phase of the alternatives considered would exceed the minimum criteria for NO<sub>x</sub> under the General Conformity Rule and would require the applicant to purchase air quality credits to mitigate for this exceedance. NO<sub>x</sub> emission offsets would be used to achieve emission reductions for the two-year period when wetlands fill and mitigation would occur should a USACE permit be issued for the project. The applicant has indicated they would purchase the appropriate amount of NO<sub>x</sub> emission credits within the New Jersey ozone non-attainment area, and these would be obtained by the applicant in accordance with NJDEP and USEPA requirements.

### **7.16.4.1 Mobile Sources**

**7.16.4.1-A COMMENT:** *Explain the differences in the CO modeling between alternatives. (NJDEP-1ZZZ)*

**7.16.4.1-A RESPONSE:** The comment pertains to the analyses summarized in the DEIS. These analyses have been updated in the FEIS and there are no differences in CO modeling between alternatives considered in the FEIS.

### **7.16.4.2 Stationary Sources**

**7.16.4.2-A COMMENT:** *For all alternatives, the impact of stationary source emissions should be included in the "cumulative" (i.e. above existing background) analysis of potential project impacts to air quality. (NJDEP-1AAAA)*

**7.16.4.2-A RESPONSE:** Please see FEIS Section 7.16.3.2. Given the minor stationary source of emissions from the project compared to existing regional emissions, air quality was not examined as part of the cumulative impact analysis for the project.

## **7.18 Human Health**

**7.18-A COMMENT:** *The development would harm the environment, long-term economic progress, and public health. (ARY-1B, ARY-1D, MAN-4H)*

**7.18-A RESPONSE:** See the response to Comment 7.1-A.

**7.18-B COMMENT:** *The proximity of the natural gas pipeline and storage tanks to the project site should be considered. (WRI-3, JMCORP-3D)*

**7.18-B RESPONSE:** Natural gas facilities are addressed in DEIS Sections 6.17 and 7.18. USACE has recently written to regulatory agencies to determine if they have any additional information on the potential health and safety risks from the LNG tanks located on the Transco property. No responses to USACE recent inquiries have been received.

## **7.19 Socioeconomics**

**7.19-A COMMENT:** *With mass transit connecting the mall with Hudson and Southern Bergen County towns, the mall could out compete neighboring commercial centers. Thriving main streetscapes should not be allowed to decline economically. (NJCF-1B)*

**7.19-A RESPONSE:** Comment noted. The information provided by the applicant indicates the project would be designed to fulfill unmet regional market demand and the project would not focus on specific local demand. The socioeconomic analysis presented in Section 7.19 of the FEIS indicates that the project would contribute to the regional economy. Effects on the local economy may include additional business activity, resulting from demand generated by businesses that would be part of the proposed development. Local businesses may be adversely affected to the extent that the businesses within the proposed development would offer similar goods or services.

Should the project induce new development in the area, such development may have secondary effects on the local economy, similar to those described above.

**7.19-B COMMENT:** *The number of workers associated with the proposed Meadowlands Mills project and Alternative D need to be incorporated in the traffic analysis. (NJDEP-1BBBB)*

**7.19-B RESPONSE:** Workers associated with the proposed project have been incorporated in the trip generations (See FEIS Section 7.15.3-2).

**7.19-C COMMENT:** *This development would be detrimental to the economic well-being commercial districts of nearby cities and towns. (MCCCAW-1G, ARY-1B, EAS-1C, HEC-2A, HEC-2C, BR-1, VRP-3D, HMP-4V, KOH-1E, MAN-4K, PER-2D, THO-4A)*

**7.19-C RESPONSE:** Please see response to Comment 7.19-A.

**7.19-D COMMENT:** *The project would impose significant costs on taxpayers by degrading water quality. (ARY-1D)*

**7.19-D RESPONSE:** Sewage from the development would be conveyed to the BCUA plant and treated. The developer would bear any sewage charges associated with the development. Please also see response to comments on Section 7.3.

**7.19-E COMMENT:** *If Meadowlands Mills is as successful as the Mall of America near Minneapolis, it will draw more than 40 million people a year. (CCSI-2A, JAC-1E, CCSI-2D, CCSI-2F)*

**7.19-E RESPONSE:** The Mall of America is a retail and entertainment facility that is reported to be in excess of 4 million square feet (s.f.). The retail and entertainment component of the Meadowland Mills Project is approximately one half this size, 2 million s.f. Gross Leasable Area (GLA). The Mall of America is a different type of retail development not directly comparable to the proposed mixed-use development on the Empire Tract that includes hotel and office components. Based on data from existing Mills projects and projected sales at the proposed project, the projected annual visitor totals to the Project are estimated by the applicant to be 13 million, as presented in the April 2001 Updated Socio-economic Fiscal Impact Analysis provided by the applicant.

**7.19-F COMMENT:** *The potential impacts to municipal services need to be evaluated with regard to police and fire protection services. (KAI-1, LAU-1A, GAS-1F, LUD-1B)*

**7.19-F RESPONSE:** Potential impacts to police and fire services are addressed in FEIS Section 7.19.2.

**7.19.2 Meadowlands Mills Alternative**

**7.19.2-A COMMENT:** *The public cost of highway construction and development will be high. (ENVCOM-3LLLLL, NRDC-2A, WRI-5C)*

**7.19.2-A RESPONSE:** Please see responses to Comments 7.14-A and 7.14-J.

**7.19.2-B COMMENT:** *The DEIS does not address that this project would impact the existing local businesses in a negative manner. (NMFS-1S, PER-1C, STA-3F, CAM-1D, BCAS-1B, RDP-1A, RDP-1B, RDP-1C, ALA-1B, KEN-1A, CHBCF-1B, DAL-2D, TOR-2B, MIK-1B, GUG-1B, HOO-1C, BAS-1C, CAS-2C, SOL-2A, TRE-1E, WEN-1B)*

**7.19.2-B RESPONSE:** Please see response to Comment 7.19-A.

**7.19.2-C COMMENT:** *Other than the short-term construction jobs, the remainder of the positions are mostly minimum-wage jobs, without benefits, and will most likely be difficult to fill. (JAC-1C, COL-1C, GRE-1, RAV-1F, CRO-1E, BOW-3B, TOR-2C, GUI-1B, NJRMA-1B, NJRMA-1C, BRU-8C, GAN-1C, LEV-2B, SHE-2C)*

**7.19.2-C RESPONSE:** As presented in Table 7.19- of this FEIS, the proposed Empire Tract Alternatives D and E would include a mix of uses (office, retail, entertainment) with a range of positions representative of those uses, offering low, middle, and higher wage incomes. Regarding the ability to fill positions, please see the response to Comment 6.18-A.

**7.19.2-D COMMENT:** In addition to economic concerns, quality of life issues of the people in the area should be addressed. (MCSPCA-1B, MIN-1C, DEL-3, CARL-2, AI32-1B, SNE-1, JFCS-1B, DAV-1C, LIS-1B, CAS-2A, NRDC-2C, NJCF-1E, RPA-1H, GAS-1G, LIS-2B, THO-4C)

**7.19.2-D RESPONSE:** Comment noted. USACE will consider all public and agency comments in conjunction with the analysis of impacts presented in the FEIS in preparing a ROD regarding whether or not to grant a permit for the applicant's proposal.

**7.19.2-E COMMENT:** *Construction of the Meadowlands Mills project will provide an immense economic benefit to the area with the creation of thousands of jobs, as well as business opportunities for small business and service companies in the region. (NJRMA-*

2B, NJRMA-2C, NJBIA-1B, HH-1C, HH-1D, BC-1A, BC-1B, BC-1C, BCCTLC-1A, DRE-1C, AFLCIO-2B, AFLCIO-2C, AFLCIO-2D, HOE-1B, LEO-1B, DEB-1D, DEB-1E, IBEW164-1B, SBO-1A, NJAFA-1B, ASA-1, DIG-2B, DEG-1B, CARL-4B, NA-2A, SH-1B, BCBT-1A, BCCTLC-2A, BCCTLC-2C, BCCTLC-2F, BCTC-1B, IBEW164-2, IBEW164-3, LECET-1C, NJRMA-1A, AFLCIO-1A, NJBCTC-1B, NJBCTC-1C, NRCC-1A, NRCC-1C, NRCC-2, NRCC-3B, NRCC-4B, SCNJ-1G, ALV-1, BEY-1, BON-1, BRA-2A, CAR-7, CIA-1A, COO-1, COT-1A, DAL-5A, DAV-2, DEB-2A, DEL-7, DEL-6, DES-2, DIM-2, DIX-1, FUS-1, HUE-1, HUN-2, JOH-5, JUN-1A, KIR-2A, KIR-2B, KIR-2C, KRE-2, KWO-1, LAR-3, LAM-3, LEG-2, LIM-1A, LOP-2, LOW-2, LOW-5, LOW-1E, LOW-3B, LOW-4A, MAC-5A, MAR-14A, MIZ-1A, PRO-2, QUA-1, RAD-2A, RAV-2A, RIC-3, RIV-2, RZE-1D, RZE-1G, SCA-1, TOR-3B, TRE-1E, TUS-1C, WES-1, WHI-6 )

**7.19.2-E RESPONSE:** Comment noted. Potential impacts to employment and business opportunities are addressed in FEIS Section 7.19.2. Please see response to Comment 7.19-A.

**7.19.2-F COMMENT:** *The positive economic impact of the proposed mall is uncertain. (KLE-1B, KOS-2D, KRA-3B)*

**7.19.2-F RESPONSE:** Comment noted. Please see response to Comment 7.19-A.

**7.19.2-G COMMENT:** *The DEIS should discuss the economic impact on Carlstadt. (CARL-1A, DEL-4D, FORM-11B, CARL-4C, CARL-5, CPS-1, CPS-2B, HRK-1C, MRCC-1A)*

**7.19.2-G RESPONSE:** Comment noted. Please see response to Comment 7.19-A. Potential economic impacts to the Borough of Carlstadt are addressed in Chapter 7.10 of this FEIS.

## **7.20 Navigation**

**7.20-A COMMENT:** *Increased air traffic into Teterboro Airport may increase local noise levels and the probability of plane crashes. (CER-1C, BOH-1D)*

**7.20-A RESPONSE:** The May 2001 Traffic Impact Study (TIS) prepared by the applicant identifies automobile traffic as the primary mode of travel to Meadowlands Mills. The TIS also addresses transit as a travel mode. The DEIS (Section 7.22) identifies vehicular traffic noise as the primary noise impact associated with the project. Although it is possible that some project patrons will travel to Teterboro Airport by plane, any increase in air traffic from such visits is not considered to be significant from the perspective of increased noise or accidents.



## **7.21 Land Use and Zoning**

**7.21-A COMMENT:** *The proposed project is clearly inconsistent with the philosophy of the State Plan which reflects the importance of open space protection and on the maintenance and utilization of infrastructure already in place. (ENVCOM-3WW, MAR-2C, PFU-1B, CNNJ-1C, BC-1I, WEC-1A, LSPC-1B, LWVBC-1B, WAS-3C)*

**7.21-A RESPONSE:** USACE regulations state that the primary responsibility for determining land use matters rests with state and local governments. The New Jersey State Development and Redevelopment Plan ("The State Plan") recognizes the statutory jurisdiction of the New Jersey Meadowlands Commission over the Hackensack Meadowlands. The State Planning Commission has relied on NJMC's regulations and Master Plan in the development and implementation of the objectives of the State Plan. See the State Plan on pages 88, 91 and 130. The *Hackensack Meadowlands Comprehensive Land Use Plan* and the NJMC *District Zoning Regulations* constitute the State Plan for the Hackensack Meadowlands.

**7.21-B COMMENT:** *The central theme of the New Jersey State Development and Redevelopment Plan (the State Plan) is to prevent sprawl and preserve environmentally sensitive property by directing future growth and development to urban and previously developed suburban locations. See N.J.S.A 52:18A-196 et seq. In this regard, the proposed Project is clearly inconsistent with the State Plan's philosophy. (VRP-4I)*

**7.21-B RESPONSE:** Please see response to Comment 7.21-A.

**7.21-C COMMENT:** *HMDC zoning requirements were changed once and may also need to be relaxed to preserve the valuable water resources of the Meadowlands and to recognize the preeminence of federal law over local zoning. (ENVCOM-3BBBB, ENVCOM-3DDDD, LTA-1C, WAL-3B)*

**7.21-C RESPONSE:** Comment noted. USACE will consider all public and agency comments in conjunction with the analysis of impacts presented in the FEIS in preparing a ROD regarding whether or not to grant a permit for the applicant's proposal. Please see response to Comment 7.21-A.

**7.21-D COMMENT:** *It is questionable whether the project adheres to regional planning principles. (EAS-1A, MRCC-2B, VRP-4I)*

**7.21-D RESPONSE:** Please see response to Comment 7.21-A. The applicable regional plan is the *Hackensack Meadowlands Comprehensive Land Use Plan*. As noted previously, the Empire Tract is zoned for mixed-use development.

**7.21-E COMMENT:** *The development is inconsistent with the goals of the Clean Water Act and Harbor Estuary Program. (DRE-2B, SCH-6B, ENVCOM-3NN, CAS-2B, WAL-4A, WIN-2A, FORM-10B, WAS-3A)*

**7.21-E RESPONSE:** Please see response to Comment 2.3-D.

**7.21-F COMMENT:** *The Bergen County Engineering Department and Department of Planning and Economic Development will review the application to address concerns regarding traffic and flooding. (CBBCF-3B)*

**7.21-F RESPONSE:** Comment noted.

#### **7.21.1.1      Regional Land Uses**

**7.21.1.1-A COMMENT:** *The impacts of the construction and operation of the proposed project on "regional land uses" need to be determined. (NJDEP-1CCCC, RPA-2C, CARL-4A, RPA-1A, RPA-1D, ROB-4, LF-9C, LWVBC-2B, MRCC-1G, MRCC-3A, MRCC-3B, MRCC-4B, NJAS-2D, NYNJBK-1B, NYNJBK-1H, CHE-1D, KOM-1B)*

**7.21.1.1-A RESPONSE:** Please see response to Comment 7.21-A. The applicable regional plan is the *Hackensack Meadowlands Comprehensive Land Use Plan*. The proposed land use is mixed-use which is consistent with the zoning designation for the Empire Tract under this plan.

**7.21.1.1-B COMMENT:** *To approve the Mills proposal would be completely at odds with New Jersey's state plan efforts and would set a precedent that could undermine the future credibility of New Jersey's state plan. This is completely inconsistent with the recommendations of the Third Regional Plan, which urged strengthening the authority of state planning efforts. It is also in RPA's view completely inconsistent with Federal policies of support for local planning and promoting sustainable development through them. (RPA-2C)*

**7.21.1.1-B RESPONSE:** Please see the response to Comment 7.21-A.

#### **7.22      Noise**

**7.22-A COMMENT:** *Provide a figure identifying the "Site" locations listed in the tables (Tables 7.22-2/4). (NJDEP-1DDDD)*

**7.22-A RESPONSE:** As described in FEIS Section 7.22, a revised analysis of potential noise impacts has been conducted based upon the NJMC Master Plan Roadway System. The locations of the noise modeling receptor sites for that analysis are shown on FEIS Figure 7.22-1.

### **7.23 Infrastructure**

**7.23-A COMMENT:** *New electrical underground and overhead transmission lines will be needed to service the project site. The potential impacts of the construction and operation of these facilities need to be discussed. (NJDEP-1EEEE, HMP-4C)*

**7.23-A RESPONSE:** The potential impacts of the construction and operation of power transmission lines are discussed in Section 7.23.1.3 of the FEIS.

**7.23-B COMMENT:** *Increased electricity, water and sewer needs of the proposed mall must be taken into account. (HAB-1C, LWVNI-1D, BOW-3A, JAC-6B, JAC-1B, JAC-1D, TOM-1E, CON-8C)*

**7.23-B RESPONSE:** Potential infrastructure impacts, including electrical, potable water and sanitary sewer systems, are addressed in FEIS Section 7.23.

**7.23-C COMMENT:** *Where is this mall going to get its electrical and water supply? (MIN-1A)*

**7.23-C RESPONSE:** As indicated in DEIS and FEIS Section 7.23, electrical power required by the proposed development would be supplied via the PSE&G East Rutherford substation. Potable water for the proposed development would be supplied through existing United Water New Jersey distribution mains serving the vicinity of the project site.

### **7.24 Indirect and Cumulative Impacts**

**7.24-A COMMENT:** *At minimum, the DEIS must contain a complete list of all proposed projects that will impact wetlands in this District and a meaningful analysis of the number of acres threatened, together with a scientifically valid analysis of cumulative impacts on wetlands functions. The Environmental Commenters are aware of many, but certainly not all, of the relevant proposed projects including the Corps' own navigation projects. Examples of proposed projects involving wetlands fill in this region include: (1) HMDC and EnCap Golf, LLC, proposal for landfill closure; (2) Liberty National Development Co., LLC, Tankport Facility Remedial Action Plan; (3) 77 Moonachie Avenue Owners Corporation, fill required for building, parking and emergency access; and (4) Corps' navigation projects, including Arthur Kill, Raritan River, and the Harbor-wide channel deepening (ENVCOM-3ZZ).*

**7.24-A RESPONSE:** USACE has prepared a cumulative impact analysis of the impacts of anticipated projects in the relevant geographic area for each identified resource. Please see Section 7.24 of the FEIS. While several of the projects listed by the commenter have resulted in the filling of wetlands, others (e.g. navigational projects) would not result in filling of wetlands.

**7.24-B COMMENT:** *Unacceptable cumulative impacts, such as shown by USFWS trend analysis, would arise from construction. (ENVCOM-3BBB, DOI-2UU, FWS-3LL, KLE-1A, DRE-2C, VRP-3B)*

**7.24-B RESPONSE:** USACE has prepared an updated cumulative impact section in response to comments on the DEIS. In Section 6.2, Wetlands and Other Special Aquatic Sites, the history of wetlands in the Hackensack Meadowlands is reviewed and estimates of the historical amount of wetlands filled are provided. Information for the historical amount of wetlands fill in the region was taken from a USFWS study. USFWS trend analysis, referenced in the comment, is taken from the 1990 USFWS report entitled "Wetlands Losses in the United States 1780's to 1980's". This document examined wetland losses from a state perspective and concluded that for New Jersey approximately 39% of the wetland resource was lost from 1780 to 1980, with approximately 915,960 acres remaining in 1980. The FEIS presents more specific information on historical wetland losses for the region of concern.

**7.24-D COMMENT:** *The development will contribute to significant, adverse cumulative impacts to the Meadowlands, the Hudson-Raritan Ecosystem and the Atlantic Flyway. (ENVCOM-3YY)*

**7.24-D RESPONSE:** The potential for significant adverse cumulative impacts to the Meadowlands from the project are discussed in Section 7.24 of the FEIS. Regional impacts have been discussed in each section of Chapter 7.0 of the DEIS and FEIS.

**7.24-E COMMENT:** *The DEIS must contain a complete list of all proposed projects that will impact wetlands in this District and a meaningful analysis of the number of acres threatened, together with a scientifically valid analysis of cumulative impacts on wetlands functions. (ENVCOM-3ZZ, ENVCOM-3AAA, LAB-2D, SIM-1B, ENVCOM-3IIII)*

**7.24-E RESPONSE:** See responses to Comments 7.2.1-B and 7.24-A.

**7.24-F COMMENT:** *Moreover, the Corps' responsibility to analyze cumulative impacts is not limited to projects currently being proposed. "The adequacy of cumulative impact analysis depends on how well the analysis considers impacts that are due to past, present and reasonably foreseeable actions. The analysis should include the use of trends information and interagency analyses on a regional basis to determine the combined*

*effects of past, present, and future actions.” [emphasis provided, EPA 1999.] (Tab 20). Trend information for historic wetlands losses are readily available for this region from a variety of sources, including USFWS. The Corps has not even made a minimal attempt to carry out this clear NEPA mandate. (ENVCOM-3BBB)*

**7.24-F RESPONSE:** Section 7.24 of the FEIS presents such a trend analysis. Please see the response to Comment 7.2.2.1.2-A.

**7.24-G COMMENT:** *The pinnacle of all the contingencies, however, is that the “overall habitat quality achieved is contingent upon the success of other habitat enhancement projects in the region that would lead to a synergy of improved habitat, assuming that they are effectively implemented.” See DEIS 7.24-4. This is an unambiguous admission that the mitigation plan is insufficient on its face, relying instead on other mitigation projects – not in Mills’ control – for its chances of success. (ENVCOM-3000)*

**7.24-G RESPONSE:** The statement referred to by the commenter addresses potential regional cumulative benefits from the proposed mitigation plan coupled with other wetland mitigation projects in the Hackensack Meadowlands. Naturally, the extent of the beneficial cumulative effect of these mitigation projects to the Meadowlands region is dependent on the level of their success. The mitigation plans for each of the development alternatives were considered separately under Section 8.3 of the DEIS, and in the FEIS. The plans are evaluated as stand alone projects designed to offset impacts from the different development alternatives. The conclusions of USACE’s evaluation are detailed in those sections. The impacts of these proposals, both positive and negative, were also considered in conjunction with those of other projects or proposals within the region in Section 7.24.

**7.24-H COMMENT:** *The mitigation plan is insufficient as it relies on other mitigation projects for its success. (ENVCOM-30000)*

**7.24-H RESPONSE:** Please see the response to Comment 7.24-G above.

**7.24-I COMMENT:** *The transportation projects that will accompany the proposed development will open up this area of the Meadowlands to further development. This is an indirect impact of the project and should have been discussed in the DEIS. (ENVCOM-3JJJJ, CCSI-1B, TSTC-1E)*

**7.24-I RESPONSE:** The TIS for the project prepared by the applicant and reviewed by USACE included future traffic growth from anticipated development and associated traffic growth in the region. See also the response to Comment 7.2.1-B. The area surrounding the project is heavily developed, with the exception of the areas for the applicant’s proposed wetlands mitigation and the Marsh Resources mitigation bank

located south of the project site, both of which will also preclude development. The issue of secondary growth is addressed in Section 7.19 of the FEIS.

**7.24-J COMMENT:** *The Department/Service considers adverse impacts of the proposed project in the context of past development – related wetland losses and reasonably foreseeable future losses (40 CFR 1508.25). (DOI-2UU, FWS-3LL)*

**7.24-J RESPONSE:** Comment noted. The comment was made in the DEIS that wetland losses should be viewed in a historical context. Please see Section 7.24 of the FEIS.

**7.24-K COMMENT:** *The attached document reports the dollar value of these costs, more than \$500 million a year in damages to the citizens of New Jersey and New York in the form of increased traffic accidents (including 7 more fatalities a year), wasted time and lost productivity to nearby business and the health consequences of increased air pollution and traffic noise. As the attached table shows, these costs are not trivial. They come to more than \$80 billion a year just within the 31 county New York Metropolitan Area. As you can see from the date on the attached, this analysis was completed four years ago. It was submitted to various agencies and individuals, including the developer. It appears to have been ignored in the preparation of the DEIS. Please make sure that these concerns are fully addressed in the DEIS and that these costs, borne in part by the surrounding communities, are fully mitigated. (CSCI-1B)*

**7.24-KRESPONSE:** The discussion of economic costs assumes that adverse project impacts from the sources identified by the commenter would be significant or not adequately mitigated. The FEIS analyzes the traffic, air quality and noise impacts raised by the commenter in Sections 7.15, 7.16 and 7.22, and determines that these impacts would be mitigated. For example, based on the traffic studies, the new traffic plan is expected to address traffic impacts from the proposed development and eventually improve the level of service on nearby roadways, resulting in no greater level of accidents than currently experienced. Other anticipated economic impacts from the project are discussed in Section 7.19 of the FEIS.

#### **7.24.2.1 Anticipated Impacts**

**7.24.2.1-A COMMENT:** *It is not clear how filling in wetlands for the proposed project and its associated roads and other infrastructure could potentially result in lesser impacts from fluvial floods. (NJDEP-1FFFF)*

**7.24.2.1-A RESPONSE:** See the response to Comment 7.13-A and the text of Section 7.13 of the FEIS.

**7.24.2.1      Significance of Indirect and Cumulative Impacts**

**7.24.2.1-A COMMENT:** *Unless water quality detention basins are implemented and maintained, the anticipated functional values of the mitigated wetlands may not be achieved, or may decrease over time. (NJDEP-1GGGG)*

**7.24.2.1-A RESPONSE:** Comment noted. Please see Section 7.2 of the FEIS, regarding Empire Tract Alternatives D and E.

**7.24.2.1-B COMMENT:** *Sections 7.24.2.2, 7.24.3.2 and 7.24.4.2: discuss the potential for increased stormwater loadings pollutants to degrade water and habitat quality in the mitigated wetlands (for example, see "Roadways and Impervious Cover" and "Increased Storm Water Loadings"). Thus, unless water quality detention basins are implemented and maintained, the anticipated functional values of the mitigated wetlands may not be achieved, or may decrease over time. In particular, this appears to be the situation project for Alternative D, which does not include detention basins (see page 7.24-13). The USACE should consider this when developing the final mitigation plan for this proposed project (NJDEP-1GGG).*

**7.24.2.1-B RESPONSE:** See the responses to Comments 7.2-C and 7.3-A.

#### 14.4.6 Chapter 8 Comments and Responses

**8.1-A COMMENT:** *The proposed freshwater mitigation area will be traversed by a number of roads, further reducing the quality of the enhanced area. Finally, the Department has observed a "failure rate" of greater than 50% for freshwater mitigation projects; a much higher success rate has been observed for brackish wetlands mitigation projects. Therefore, it appears that the proposed wetlands mitigation plan will not provide those functions and values needed to benefit fish and wildlife resources. (NJDEP-1P)*

**8.1-A RESPONSE:** The comment refers to wetland mitigation plan for the Empire Tract Alternative D. The comment also refers to the 206-acre fill project described as the Meadowlands Mills Alternative, which has not been further analyzed in the FEIS due to concerns regarding environmental impacts. Several reviewers criticized the freshwater enhancement component of the proposed wetland mitigation approach on the basis of sustainability in the face of exotic plant invasion, and degradation from storm water loadings and other disturbance (e.g. roads). In addition, USACE and USEPA have determined that the proposed freshwater wetland enhancements would not be given mitigation credit in offsetting project impacts to wildlife habitat. As a result, the applicant was asked to revise its plan to include a larger component of brackish tidal wetlands restoration. The applicant has redesigned the wetlands mitigation plan (as presented for Empire Tract Alternative E in Chapter 8) to enlarge the brackish tidal wetland restoration component. In addition, the roadway formerly proposed to traverse the mitigation area (Route 120B) is inconsistent with NJMC's regional traffic plan, and thus is no longer proposed as the traffic plan for Empire Tract Alternative E (see responses to Comments on Chapter 5). Although a tidal berm is still proposed in the general location as the previous roadway, the disturbance and non-point source pollution from traffic along that proposed roadway would no longer occur if a permit for Empire Tract Alternative E were approved.

**8.1-B COMMENT:** *Stormwater discharges could compromise the functioning and value of the freshwater wetlands and could potentially influence habitat quality over the long term. (DOI-2C, NJDEP-1N, ENVCOM-3GGG, FORM-14E)*

**8.1-B RESPONSE:** Several commenters to the DEIS voiced concern specifically about proposed storm water management plans for development alternatives considered in the DEIS, and their potential impacts on the habitat quality of the proposed freshwater wetlands enhancement area. These comments are addressed in the response to Comment 8.1-A above, as well as in Sections 7.2 and 8.3 of the FEIS. The proposed Empire Tract Alternative E provides for the majority of storm water discharges from the project to be directed to a 15-acre detention basin located within the remaining non-tidal wetlands on site, then out to the Hackensack River. The concept is further discussed in Sections 7.2 and 8.3 of the FEIS.



**8.1-C COMMENT:** *The mitigation proposal is inadequate when compared to other mitigation required by the New York District. The 1.6 to 1 is a non-starter especially when considering the uncertainty of the enhancement techniques. (VRP-4G)*

**8.1-C RESPONSE:** USACE found the mitigation plan proposed in the DEIS to be inadequate. On the basis of calculations conducted by USEPA and USACE after publication of the DEIS, the wetland mitigation acreage ratio for offsetting impacts to wildlife habitat was calculated to be 2.02 to 1, or 271 acres of brackish tidal restoration for a 134-acre fill project (see Appendix B and Sections 7.2 and 8.3 of the FEIS). These calculations account for lag time required for a functioning community to be established over a 10-year period. As indicated in Sections 7.2 and 8.3 of the FEIS, the revised mitigation plan for Empire Tract Alternative E is an improvement over prior plans proposed by the applicant. USACE still has some concerns regarding the current design of the mitigation plan, which will need to be addressed by the applicant in a revised mitigation plan design, in the event that a permit is issued.

**8.1-D COMMENT:** *The freshwater components of the mitigation plans create storm water detention basins rather than wetlands. Storm water detention basins are considered structures and when built in wetlands need to be mitigated for. (ENVCOM-3FFF, HMP-3D, HMPA-1C)*

**8.1-D RESPONSE:** Please see responses to Comments 8.1A and 8.1-B. USACE indicated concerns regarding the use of freshwater wetlands for storm water storage to the applicant. The mitigation plan for Empire Tract Alternative E, prepared in response to USACE concerns, proposes the construction of a 15-acre storm water detention basin to handle runoff from developed areas of the site. The basin is not considered by USACE to be a structure. However, 1.25 acres of fill required for construction of a berm surrounding the basin is included within the 134-acre fill requirement for this alternative. As a result of basin construction, storm water impacts would be limited to a much smaller area than was the case with previously proposed alternatives. The berm would encompass 15 acres of common reed wetland that would become degraded over time. In addition, portions of the remaining non-tidal wetlands would receive roof runoff and road runoff in areas immediately adjacent to the development. The resultant adverse impacts were incorporated into the environmental impact analysis of this alternative (see Sections 7.2 and 8.3 of the FEIS) and will be taken into consideration in the subsequent ROD for the permit application.

**8.1-E COMMENT:** *The DEIS should present information to show how the enhanced wetlands would not be subject to domination by invasive species such as purple loosestrife (*Lythrum salicaria*) and other exotics. Also, the DEIS should provide examples of restored wetlands in the region to show that such mitigation projects have a reasonable chance of long-term success. (DOI-2TT, FWS-3KK)*

**8.1-E RESPONSE:** A maintenance and monitoring plan for the wetlands mitigation plan was prepared by the applicant and was provided as Appendix M of the DEIS to address this issue. Because of concerns regarding the need for maintenance to control loosestrife invasion in the freshwater enhancement area, and other sustainability issues, the applicant was asked to provide a larger proportion of tidal brackish mitigation acreage. Under the wetlands mitigation plan for Empire Tract Alternative E, a larger proportion of restored tidal wetlands are proposed by the applicant to compensate for lost wildlife habitat and water quality improvement functions resulting from the placement of fill. The freshwater enhancements proposed are considered by USACE as useful for flood storage.

Regarding the potential success of mitigation within the region, mitigation projects within estuarine ecosystems tend to have a higher probability of success than freshwater projects, particularly when tidal flows are restored. This assumes the objectives are realistic for a specific regional setting. The tidal brackish wetland component of the wetlands mitigation plan would not be susceptible to invasion by purple loosestrife as would a freshwater area. Salinity levels and daily inundation would help to hinder and limit the growth of invasive plant species. Section 7.2 of the FEIS lists a number of proposed and completed wetland mitigation projects in the Hackensack Meadowlands. Because enhancement and mitigation programs are relatively recent, and site-specific data on wetland functions from restored or enhanced sites are limited, the available information on the long-term success of these sites is limited. Thus, a monitoring and maintenance program is a critical element to ensuring the success of approved mitigation projects.

**8.1-F COMMENT:** *The mitigation plan for the 206 acre fill proposal requires the filling of approximately 38 additional acres for wetlands to create islands, which should require a separate Department of the Army permit or should be included in the total fill described by this application. The fill included in the mitigation plan must itself be mitigated. (NJDEP-1L)*

**8.1-F RESPONSE:** The 206-acre fill alternative, referred to as the Meadowlands Mills Alternative, is not further analyzed in the FEIS.

Regarding the allowable amount of upland islands, USACE and Meadowlands Interagency Mitigation Advisory Committee (MIMAC) have indicated that upland islands are an acceptable wetland mitigation component up to a maximum of five percent of the total wetland mitigation area. The upland islands, as proposed by the applicant in their mitigation plan for Empire Tract Alternatives D and E, would be planted with trees and shrubs.

Upland islands are intended to provide wildlife habitat by creating an interspersed habitat types, providing some passerine bird habitat, particularly for migrants, perches for raptors, resting cover for waterfowl, and habitat for small mammal habitat. As proposed, such upland islands may be considered by USACE to be a component of the mitigation

plan, and are not considered to be a separate fill project requiring additional mitigation. USACE is still considering whether the acreage of upland islands proposed by the applicant would be justified in this case, in the event that a permit is issued. The upland island component of the proposed wetland mitigation plans for Empire Tract Alternatives D and E both include a maximum of five percent upland islands, unlike the previously proposed 206-acre fill project under the Meadowlands Mills Alternative (which called for 38 acres of islands).

**8.1-G COMMENT:** *The excavation, regrading, volume and size of the upland islands are dictated by the need to accommodate off-site and on-site storm water flows and construction of drainage channels. (DOI-2D, ENVCOM-3HHH)*

**8.1-G RESPONSE:** According to the applicant, the upland islands will be created from excess material from excavations required as part of the mitigation project, such as construction of waterways and open water areas. In the event of permit issuance, USACE would require a final mitigation plan with engineering drawings and other specifications indicating the amount of fill, design contours/elevations, a planting plan, and similar supporting information to ensure that the upland islands would meet the objective of providing suitable wildlife habitat. Please refer to response 8.1-F.

**8.1-H COMMENT:** *We continue to recommend that the entire mitigation consist of brackish wetlands. This is consistent with the recommendations of the Meadowlands Interagency Advisory Committee (MIMAC). In addition, we disagree strongly with the assertion in the DEIS that a reduction in fill equates to an equal reduction in mitigation required. (NMFS-1U)*

**8.1-H RESPONSE:** After receipt of comments on the DEIS, USACE asked the applicant to revisit this issue. The amount of tidal brackish wetlands proposed under the wetland mitigation plan for Empire Tract Alternative E reflects brackish tidal acreage recommendations of USACE and USEPA (see Appendix B of the FEIS).

Regarding the issue of fill reduction versus mitigation requirements, the DEIS considered alternatives with a reduced footprint and assumed a proportional reduction in mitigation acreage requirements because site-specific mitigation ratios had not yet been determined for the project.

**8.1-I COMMENT:** *Planting details and minimum survival rates are not provided. (ZED-1J)*

**8.1-I RESPONSE:** USACE generally does not require such specifics for evaluation of conceptual mitigation plans. General planting information for the habitat types in the wetland mitigation areas was provided by the applicant, in the description of the plan for Empire Tract Alternative E, as well as in the Conceptual Wetland Mitigation Plan for Empire Tract Alternative D (see DEIS, Appendix B). More specific planting details for

the wetlands mitigation plan would be provided in the final wetland mitigation design, should a permit be issued for any development alternative. Minimum planting survival rates are provided in the Wetland Mitigation Monitoring and Maintenance Plan (see Appendix M of the DEIS), and include the standard 85 percent survival rate typically required by USACE.

**8.1-J COMMENT:** *There is considerable evidence that restored *Spartina* marshes do not have normal marsh structure and function for many years. Many of these studies (e.g., Zedler et al., 1991) indicated that, for a number of years, normal marsh function had not been restored. There was less plant growth, reduced diversity of invertebrates and increased numbers of exotic species in the constructed marsh than in nearby natural ones. Killifish utilizing restored marshes consumed less food than those in natural marshes (Allen et al., 1994). Decades, rather than years, may be needed before normal marsh functions are restored. As has been pointed out by Levin et al. (1996) a process of succession takes place in created marshes. Studies have demonstrated clearly that newly created *Spartina* marshes may take decades to achieve the productivity and diversity of natural marshes. (WEI-11C)*

**8.1-J RESPONSE:** The lag time referred to by the commenter in establishing functioning *Spartina* communities is accounted for in calculations of the acreage of mitigation that would be required for the project in the event of permit issuance (see Appendix B of the FEIS, Attachment 1). A ten-year period was selected as a reasonable time frame for establishment of functional emergent wetland communities. In addition, the uncertainty associated with the success of any mitigation plan is acknowledged both in the DEIS (see Section 8.3, as well as the FEIS Sections 7.2 and 8.3), wherein USACE describes concerns with the design of the mitigation plan itself. In the event that a permit is issued for any development alternative, this uncertainty may be addressed by implementation of a sound monitoring plan to ensure that the objectives of the plan are met, and by focusing permit conditions on the sustainability of the plan. In evaluating the likelihood of success of the plan, USACE considered the type of mitigation proposed, as well as the probability that the objectives could be achieved within the project life.

The main component of the wetlands mitigation plan for Empire Tract Alternative E is tidal restoration of existing wetlands where flow is restricted by dikes and tide gates. Some of the studies referenced by the commenter reflect situations where wetlands were degraded by placement of fill material, and hence many years were required to create or re-establish a sufficient organic substrate to promote many wetland functions. USACE believes that in cases where fill material has not been placed on the existing wetland surface and the existing substrate consists of peat, the restoration of tidal flow has a higher probability of restoring wetland functions. . For example, Langis et al. (1991) found a direct relationship between the level of organic matter in the wetland substrate and nutrient levels; soils with high organic levels had higher levels of nutrients. While one cannot predict success with certainty, USACE would require a monitoring plan in the event of permit issuance to ensure that the goals and objectives of the proposed mitigation are achieved.

**8.1-K COMMENT:** *No reference systems are identified for planning or assessing the enhancement projects. Creating suitable plans for the enhanced communities requires a reference community to serve as a model system. (ZED-1H)*

**8.1-K RESPONSE:** Please see response to Comment 8.1-E. According to the applicant, tide range information associated with naturally occurring and enhanced tidal marshes within the region has been used to identify the range of elevations required to establish mudflats, emergent marsh and upland island habitats in the tidal restoration component of their proposed mitigation plan; see DEIS, Appendix B, Conceptual Wetlands Mitigation Plan. A monitoring program will be performed during and after construction of the mitigation project to assess the progress of the restored and enhanced systems; see DEIS, Appendix M, Wetland Mitigation Monitoring and Maintenance Plan.

**8.1-L COMMENT:** *The proposed Route 120B (an unavoidable design constraint) would bisect the Empire tract, creating immeasurable disturbance to the wetlands. Where would the runoff of gas, oil, radiator fluid and other contaminants (e.g., Zn deposition) that travel on the roads end up? What would happen if the road was frozen and needed to be salted? Would these salts end up in the freshwater wetlands, and if so, how would they remain freshwater? (WIN-3KK)*

**8.1-L RESPONSE:** In Sections 7.2 and 8.3 of the DEIS, USACE identified similar concerns with respect to the mitigation plans described in the DEIS for previously proposed development alternatives. Since publication of the DEIS Route 120B is no longer proposed in the updated transportation improvement plans since it is not consistent with NJMC's regional transportation plan. The wetlands mitigation plan design for Empire Tract Alternative E eliminates Route 120B from the project, and its associated disturbance to the wetland mitigation area that would result from traffic and road runoff. An earthen berm would still be placed in the same location as the roadway to act as a tidal barrier between the restored tidal brackish wetlands and remaining non-tidal enhanced wetlands (see Sections 7.2 and 8.3 of the FEIS).

**8.1-M COMMENT:** *In my opinion, there are numerous flaws in the proposed mitigation plan. They propose to enhance the functional value of the tract by restoring tidal flow, removing Phragmites and planting a variety of wetland types, several of which have never existed in the Meadowlands nor the state. As the current habitat is clearly of high value, it is of great concern to me that they propose to radically alter the topography and hydrology of the site in the hope of increasing wetland functions. (WIN-3JJ)*

**8.1-M RESPONSE:** In the FEIS, USACE has focused on existing wetland functions, and impacts to those functions. The proposal by the applicant to offset impacts to existing functions by restoration of tidal flow is one of the primary issues discussed in the

FEIS. USACE has permitted enhancement and restoration of tidally restricted wetlands in the Meadowlands as a reasonable means of compensation of impacts from fill projects. The analysis presented in the FEIS looks to quantify impacts and related functional levels and the likelihood of effectiveness of the proposed mitigation plan. Moreover, the literature to date on tidal wetlands and tidal restoration projects indicate that tidal restoration often results in significant benefits both to water quality improvement function as well as wildlife habitat for species groups of management concern in the Meadowlands. USACE believes that restoration of tidally restricted wetlands, if implemented properly, can be an effective means of compensating for fill impacts. However, USACE had identified concerns regarding mitigation plans previously described in the DEIS. With regard to the revised Empire Tract Alternative E wetland mitigation plan, USACE believes the acreage of mitigation offered to sufficiently offset 134 acres of proposed fill, but still has some concerns with aspects of the plan design (see response to Comment 8.1-A).

*8.1-N COMMENT: The proposed mitigation activities will not compensate for the wetlands functions and values that will be lost from the site. And even if they were adequate, the proposed rail line, or the proposed New Jersey Turnpike ramp and Route 120B, for example, will cut across the proposed mitigation areas, thus reducing the value of those areas for fish and wildlife. (PAC-1E)*

**8.1-N RESPONSE:** Please see response to Comment 8.1-M. In addition, after analysis and consideration of site-specific data, USACE has determined that the 276 acres of tidal restored wetlands for Empire Tract Alternative E would likely provide sufficient compensation for most of the lost wetlands functions and values from the project (see Section 8.3 and Appendix B in the FEIS). The potential future rail line, the West Shore Commuter Rail, is presently subject of a DEIS scoping effort and thus its impacts are unknown at this juncture. One proposal includes elevating the line on pilings. Any resulting impacts to wetlands from the rail line would have to provide appropriate mitigation, and the EIS for that project would have to consider cumulative impacts resulting from that plan. As noted above, the Route 120B roadway has been eliminated from the Empire Tract Alternative E project design. USACE continues to have concerns regarding fragmentation of the mitigation area, as well as disturbance to the tidal restoration area from the proposed New Jersey Turnpike entrance ramp. Adequate vegetative buffers would be a necessary component of any final mitigation plan.

## **8.2. Goals of Wetland Mitigation Activities**

*8.2-A COMMENT: The goal of mitigation does not replace the habitat needed by threatened and endangered species currently using the site. (ENVCOM-3WWW)*

**8.2-A RESPONSE:** The present use of the Empire Tract by threatened and endangered species is discussed in Section 6.8 of the EIS. No federally listed threatened or endangered species have been identified or recorded on the site. Several state threatened

or endangered bird species have been recorded on the site, but no evidence of breeding activity was reported in a year-long study conducted by the applicant from 1996-1997, nor is there any documentation of nests on the Empire Tract. The anticipated effectiveness of the proposed wetland mitigation plan in offsetting impacts to these species is discussed in Sections 7.8 and 8.3 of this FEIS. The analysis concludes that the tidal brackish wetland component of the mitigation plan will continue to provide habitat for several of these species, however fragmentation remains an unmitigated impact to bird species with larger area requirements.

**8.2-B COMMENT:** *USACE does not keep an inventory of required mitigation projects or their success or failure and should not rely on local mitigation projects to support the mitigation plan. (ENVCOM-3RRR, LOP-3, KOC-1C, ENVCOM-3RRRR)*

**8.2-B RESPONSE:** Wetland mitigation projects in the Hackensack Meadowlands are reviewed and monitored by USACE as part of permit condition compliance. These projects must provide annual monitoring reports and thus provide useful data regarding successful mitigation design. The cumulative impacts (both positive and negative) of any project and its mitigation component in the HMD are by definition dependent upon the positive and negative impacts of other developments in the region. Please see response to Comment 8.1-M.

**8.2-C COMMENT:** *Mitigation efforts cannot yet claim to duplicate lost wetland functional values or that restored wetlands maintain regional biodiversity or recreate functional ecosystems. (ENVCOM-3TTT, ENVCOM-3UUU, ENVCOM-3TTTT, ENVCOM-3UUUU, ENVCOM-3XXXX, CAM-7C, ZED-II, ZED-1A, ZED-1L, WIN-3JJ, WIN-3QQ, VRP-4H, LAR-2B, DEM-1B)*

**8.2-C RESPONSE:** Comment noted. Please see response to Comments 8.1-E and 8.1-J.

**8.2-D COMMENT:** *The goals of the "mitigation" though not well articulated are patently not aimed at replacing habitat needed by the threatened and endangered species currently using the site. Mills provides no evidence to show that threatened and endangered species, such as the northern harrier, would use the novel wetlands habitat proposed in the "mitigation" plan. (ENVCOM-3WWW)*

**8.2-D RESPONSE:** USACE has reviewed the goals presented by the applicant, and found them to be consistent with the goals of the *Wildlife Management Plan for the Hackensack Meadowlands* prepared by the U.S. Fish and Wildlife Service. It is true that the mitigation plan proposals do not specifically target endangered species, but at the same time, the Empire Tract does not appear to support significant breeding populations of these species either. The tidal restoration component of the mitigation plan focuses on species of management concern in the HMD. Fragmentation impacts on Northern harrier

and other species with larger area requirements do remain a concern, as discussed in Sections 7.8 and 8.3 of the FEIS.

**8.2-E COMMENT:** *Once it has been determined that the enhancement approach has not performed effectively it will be too late – more than 200 acres of wetlands will be destroyed at that point. (VRP-2H)*

**8.2-E RESPONSE:** The development alternatives evaluated by USACE are for 134-acre fill projects. The revised Empire Tract Alternative E wetland mitigation plan contains a tidal restoration approach that is considered to be more sustainable and have less risk of failure than previous alternative plans proposed by the applicant and described in the DEIS. In the event that a permit were issued, if annual monitoring programs indicate that the proposed plan was not meeting its objectives, USACE could require permit modifications or additional acreage.

**8.2-F COMMENT:** *The outcome of enhancement efforts should not be judged solely on the basis of one data set for the pre-enhancement wetland. We need to know more than that the new ecosystem is different from the old ecosystem. We need to know if it benefits regional biodiversity and wetland functioning. (ZED-1I)*

**8.2-F RESPONSE:** The DEIS included mostly qualitative assessments of projected wetland functions associated with future conditions. At the time of DEIS preparation, additional data were still being collected, concerning the wetlands on the Empire Tract. The FEIS includes an analysis of mitigation requirements based on literature data on natural and restored tidal wetlands as an indication of projected future conditions with mitigation, and as a point of reference for comparison with existing conditions.

**8.2-G COMMENT:** *We need to bring back the old cedar swamp, where there was truly wild life as it was 20 or 30 years ago. (SH-2B, NJAS-2I)*

**8.2-G RESPONSE:** Due to historical changes in water quality and flows in this reach of the Hackensack River, USACE considers the successful re-establishment of cedar swamps to be highly unlikely. Rather, the applicant was directed by USACE (based upon recommendations from the MIMAC) to provide a larger proportion of tidal brackish wetlands than previously proposed, since the probability of success is higher, and these systems are viewed as more sustainable than freshwater enhancement or restoration.

**8.2-H COMMENT:** *I've never seen more ridiculous logic than if we build a mall, we'll get all these environmental benefits and all the nature walks and return to wildlife. It really daunts the mind to think that therein lies the answer. (SCHC-1A)*



**8.2-H RESPONSE:** Under the Section 404 and 10 permitting program, USACE is committed to providing an objective review of the applicant's proposal, both from the perspective of adverse impacts as well as net benefits.

**8.2-I COMMENT:** *Mitigation is not the reason to grant a permit (LWVBC-2G, CAM-6B).*

**8.2-I RESPONSE:** Mitigation is one of several factors to be analyzed in reaching a permit decision. Pursuant to the USEPA Section 404 (b)(1) Guidelines, a project must be analyzed for avoidance, minimization and mitigation for adverse impacts to the aquatic ecosystem. Mitigation must be directly related to the impacts and appropriate to the scope and degree of those impacts. For USACE's analysis of the applicant's project, it is appropriate to consider mitigation when assessing the overall project impacts and is thereby included in the evaluation of the project as part of the permit application decision-making process.

**8.2-J COMMENT:** *Although Section 8.3.1 (page 8.3-1) states that "the proposed activities adequately address each of the applicant's stated [mitigation] objectives", there is no clear statement as to whether these activities will achieve the federal and state requirements. In this regard, the DEIS only refers to the MIMAC, and states that "the final mitigation plan ... will incorporate input from the MIMAC, and will be consistent with MIMAC policies" (page 8.3-2). Section 8.3.2 further concludes that "the stated overall objectives of each mitigation approach look to be consistent with no net loss of wetlands functions and values". These statements and conclusions are inconsistent with evaluations of the proposed wetlands mitigation plan, as discussed above, and the recognition in the DEIS that the proposed mitigation plan is inadequate to compensate for the impacts of wetlands fill, and that a final mitigation plan must be developed. (NJDEP-1Q)*

**8.2-J RESPONSE:** MIMAC includes representatives of state and federal agencies, each representing the specific natural resources they are entrusted with managing. The goals of the plan were deemed to be consistent with both federal and state policies. The specific sentences cited by the commenter from the DEIS on p. 8.3-1 and 8.3-2 refer to consistency of the *goals and objectives* of the plan, not the plan itself. The DEIS concluded that the objectives were likely to be sufficient to achieve the no net loss goal, but the plan itself was not.

**8.2-K COMMENT:** *Any positive benefits forecast from the mitigation plan are completely obviated by the factors upon which they are expressly made contingent. These factors include: (1) the extent to which the loss of habitat would contribute toward regional fragmentation of wetland habitats; (2) the extent to which the fill would contribute to cumulative impacts to wetlands functions on a regional scale; (3) the extent to which the presence of impervious surfaces, and entrance and exit roadways to the*

development, affect flooding and habitat; (4) the inability to prevent colonization by exotic species (at DEIS 7.5-24, there is an admission that the area will be prone to purple loosestrife invasion); and (5) how polluted storm water runoff loadings will be, because runoff is the primary source of water for the freshwater enhancement areas. See DEIS 7.2-5; 7.24-4; 7.2-16; 7.2-21. (ENVCOM-3NNN)

**8.2-K RESPONSE:** Comments 4 and 5 have been largely addressed by the applicant in its proposal referred to as Empire Tract Alternative E (although see Section 8.3 of the FEIS and comments above regarding our concerns over the storm water detention basin issue). Comments 1 and 2 are addressed in Chapter 7 of this FEIS and these concerns that would be factored into the ROD prepared by USACE over whether or not to grant a permit. Comment 3 refers to both the flooding issue (see Section 7.13 of this FEIS) which has been addressed, as well as the roadway buffer issue raised in Section 8.3, which is still of concern to USACE.

**8.2-L COMMENT:** *The lasting value of the proposed enhancement efforts is highly questionable. The removal of Phragmites and the subsequent contouring and planting of 335 acres will produce unknown outcomes. One potential outcome is the return of Phragmites-dominated vegetation. In fact, the plan indicates that tidal water is of low salinity (5-18 ppt, lower after heavy streamflows). Wouldn't these salinities favor Phragmites over Spartina? The dredging of brackish sediments and repositioning as berms will expose substrates that can concentrate salts during dry periods and develop acidity following oxidation. Various chemical changes would be expected in the soils, including release of toxins. What assurances are there that desirable vegetation would establish on such exposed soils? It seems likely that a few weedy species would become dominant, especially where the material is rototilled and left fallow (cf. Page 3-20). (ZED-1K)*

**8.2-L RESPONSE:** As a mean of addressing uncertainties such as those raised by the commenter, USACE has recommended brackish tidal restoration as the major component of wetlands mitigation, as the probability of success within the region is higher than other forms of mitigation. The daily flooding of river water is expected to greatly diminish the possibility of *Phragmites* returning to the area. It is anticipated that any salt concentration increases or acid production of sediments in the mitigation area would be short-term in nature due to daily flushing. In the event of permit issuance, the concerns raised by the commenter can be addressed by a suitable monitoring and contingency plan, as well as appropriate permit conditions.

**8.2-M COMMENT:** *A full evaluation of mitigation is premature since the DEIS fails to demonstrate that the applicant has complied with the 404(b)(1) guidelines concerning avoidance and minimization. This is a sequenced process which requires that there be no practicable off-site alternatives, and that the on-site impacts be minimized before mitigation can be used to offset the unavoidable impacts. Based on the information supplied to us so far, we cannot agree that this has occurred. Until these steps are*

*completed, a project foot print and its impacts cannot be defined, and it is not possible to assess the adequacy of the mitigation. Once the applicant has demonstrated that there are no alternate sites and that on-site minimization has occurred to the maximum extent practicable, a mitigation plan which compensates fully for the lost wetland functions and values should be developed. At that point, NMFS, along [with] the other members of the MIMAC, must review and assess the adequacy of the mitigation proposal. (NMFS-1T)*

**8.2-M RESPONSE:** In Chapter 5.0 of the DEIS, USACE described off-site alternatives and on-site minimization measures. This section was further revised with updated and additional information requested by the applicant, as presented in the FEIS. As explained in Section 5.5.1, USACE has also analyzed on-site minimization and carried forward Empire Tract Alternatives D and E, the two on-site alternatives with the smallest footprints, and hence wetland fill requirements that still meet the applicant's stated project purpose.

**8.2-N COMMENT:** *The proposed wetland enhancement gives no new acreage and the preservation of 45 acres of wetlands doesn't count as mitigation. The 38 acres of upland islands would further reduce the wetland acreage. (DOI-2A, FWS-3B, NJAS-2H)*

**8.2-N RESPONSE:** Regarding the acreage of upland islands, please see the response to Comment 8.1-F. According to federal regulations and guidance e.g. USACE Regulatory Guidance Letter 01-01, wetlands creation, restoration, enhancement and preservation may be used as mitigation, with the required type and acreage of each varying on a site-specific basis. The proposed preservation area is not accounted for in mitigation acreage requirements calculated by USACE and USEPA for the project (see Appendix B of the FEIS).

### **8.3 Assessment of Wetland Mitigation Activities**

**8.3-A COMMENT:** *The wetland mitigation plan does not account for site-specific information, such as lag time value, fragmentation, uncertainty, cumulative impacts to regional fish and wildlife resources, and impacts to state threatened and endangered species, factors which should increase the mitigation ratio and required acreage. (ENVCOM-3NNNN, WIN-300)*

**8.3-A RESPONSE:** Please see response to other comments above on Section 8.3. These issues were discussed in the DEIS. USACE has subsequently considered these factors in establishing the acreage of wetland mitigation required in order to offset the project's impacts. In a letter dated April 2, 2001, and accompanying assessment dated March 9, 2001, which is provided as Attachment 1 in Appendix B of the FEIS, USEPA has provided an analysis of the wetland mitigation requirements of the project relative to wildlife habitat, and which has addressed in part the related wetland mitigation monitoring requirements necessary to address these issues. USEPA's mitigation ratio analysis accounts for lag times inherent in the development of the wetland functions after

construction. Uncertainty in the calculation of acreage requirements would be addressed by emphasizing plan components that would increase the probability of success, such as increasing the area of vegetated buffers and requiring a larger proportion of emergent wetland habitat. Potential impacts of fragmentation and/or cumulative impacts on habitat loss, including impacts to state endangered or threatened bird species will be further considered when USACE prepares a ROD for the permit application.

**8.3-B COMMENT:** *The mitigation plan is actually the destruction of 221 acres of wetlands. (ENVCOM-3LLL)*

**8.3-B RESPONSE:** The commenter is referring to proposed freshwater enhancement measures described as mitigation for development alternatives considered in the DEIS. Since the time of DEIS preparation, USACE has requested the applicant to develop a mitigation plan that focuses on brackish tidal mitigation (i.e., Empire Tract Alternative E). Some freshwater enhancements are proposed for a 130-acre area of non-tidal wetlands in this mitigation plan, but USACE and USEPA is allowing mitigation credit within this area only for flood storage, and water quality improvement functions, to the extent that the applicant can demonstrate water quality improvement.

**8.3-C COMMENT:** *The mitigation plan will result in a greater diversity of plant and animal life and will contribute immensely to the ecological life of the wetlands. (BC-1G)*

**8.3-C RESPONSE:** USACE has attempted to provide a balanced discussion of project impacts and benefits in the DEIS and FEIS. It is acknowledged that several components of mitigation plans proposed to date would have site-specific and regional benefits. These benefits need to be viewed from the perspective of the extent to which they are likely to be successful at offsetting project impacts to existing wetland functions on the Empire Tract.

**8.3-D COMMENT:** *A final mitigation plan needs to be developed to address compliance with the 404(b)(1) Guidelines concerning avoidance and minimization. (NMFS-1T, NJDEP-1Q, HMDC-1B)*

**8.3-D RESPONSE:** A revised discussion of avoidance and minimization of adverse impacts to aquatic ecosystems is found in Chapter 5.0 of the FEIS. Chapter 8.0 states that USACE will require the design and submission of a final wetland mitigation plan in the event that a permit is issued. Chapter 9.0 of the FEIS contains a discussion of the Section 404(b)(1) evaluation process.

**8.3-E COMMENT:** *The success of this proposed mitigation plan is entirely contingent on the success of other unrelated mitigation projects in the region. (ENVCOM-30000, NRDC-1B)*

**8.3-E RESPONSE:** The evaluation of the wetland mitigation plans for the development alternatives were based on their own merits as a standalone project. Cumulative impacts (both positive and adverse) are always dependent upon other projects within the region (see Section 7.24 of this FEIS). Please also see responses to Comments 8.2-B and 8.2-K.

### **8.3.1 Consistency of Proposed Mitigation Plan Objectives with No Net Loss Goal**

**8.3.1-A COMMENT:** *The applicant's proposed wetland mitigation plan is insufficient to offset loss of wetland functions and values, and does not address fragmentation impacts and reduction in the wetland size on the site. (ENVCOM-3LLLL, WIN-3RR, ENVCOM-3PPPP, PAC-1E)*

**8.3.1-A RESPONSE:** The net loss of wetland acreage and the fragmentation resulting from the projects are impacts that were identified in the DEIS, and are further addressed in the FEIS. USACE has analyzed the wetland mitigation acreage requirements for this project (see Appendix B) and has concluded that the amount of tidal brackish wetland acreage proposed by the applicant should be sufficient to offset the loss of wetland functions (wildlife, flood storage, and water quality improvement function) for the filling of 134 acres under Empire Tract Alternative E. USACE still has concerns regarding the design of the currently proposed wetland mitigation plan for Empire Tract Alternative E. (see Section 8.3 of the FEIS).

**8.3.1-B COMMENT:** *No amount of mitigation can replace or offset the proposed wetlands impacts from the project. (DOI-2J, ENVCOM-3II, ENVCOM-3MMMM, WIN-1G, HAB-1O, MCC-1A, LAH-1A, GOM-1A, ANJEC-1C, BCAS-2F, DES-1A, BCAS-1A, MAR-1B, HIL-2B)*

**8.3.1-B RESPONSE:** USACE acknowledges that certain project impacts, such as habitat fragmentation, may not be fully mitigatable. These concerns will be considered in the ROD for the permit application.

### **8.3.2 Influence of Mitigation Plan Components on Wetland Function**

**8.3.2-A COMMENT:** *There is no explanation of how the freshwater component will be managed for wildlife usage and habitat while at the same time be managed for stormwater volume and water quality concerns. (DOI-2MM, FWS-3FF)*

**8.3.2-A RESPONSE:** USACE shares these concerns regarding the development alternatives considered in the DEIS, including Empire Tract Alternative D. Under Empire Tract Alternative E the applicant has proposed a wetlands mitigation approach that separates wildlife habitat from flood storage and water quality compensation. The tidal brackish restoration component of the mitigation plan is intended to provide wildlife

habitat compensation and would be managed accordingly in the event of permit issuance. USACE and USEPA have indicated to the applicant that mitigation credit for wildlife habitat will not be given for non-tidal wetlands proposed for freshwater enhancement by the applicant. The non-tidal freshwater component of the mitigation plan would provide flood storage compensation and some water quality improvement functions as well. This approach differentiates between the management goals for the two distinct components of the wetland mitigation plan.

**8.3.2-B COMMENT:** *Restoration of tidal flow would improve wetland functions such as wading bird habitat, reverse effects of degradation, and contribute to the long-term viability of the Harbor Estuary. (FWS-3M)*

**8.3.2-B RESPONSE:** USACE agrees with the comment, and has asked the applicant to focus on tidal brackish mitigation as a result (i.e., Empire Tract Alternative E). The tidal restoration component of the wetland mitigation plan, if successfully implemented with buffers and sufficient areas of emergent vegetation, is expected to improve existing wetland functions, by providing an increase in habitats used by marine fish, shorebirds, wading birds and waterfowl. Restoration of tidal flows would also reconnect the existing non-tidal wetland with the Hackensack River, thereby enabling the mitigation project to contribute to the long-term viability of the estuary.

**8.3.2-C COMMENT:** *The environmental management of the region necessitates remediation of adverse effects of habitat fragmentation, loss and degradation. (USEPA-1M, DOI-2W, FWS-2S, DOI-2SS, FWS-3JJ, NMFS-1V, NJDEP-1HHHH, WIN-3LL, LWVNJ-1C)*

**8.3.2-C RESPONSE:** USACE agrees this is an issue of concern that needs to be addressed in the ROD, and the issue is discussed in Sections 7.2, 8.3 and 7.24 of the DEIS and FEIS.

**8.3.2-D COMMENT:** *What would happen if the road was frozen and needed to be salted? Would these salts end up in the freshwater wetlands, and if so, how would they remain freshwater? (WIN-3KK)*

**8.3.2-D RESPONSE:** According to the applicant, the salts applied to roadways during winter conditions are not applied in such quantities as to significantly raise salinity levels in the wetlands; winter snow meltdown and spring rains would dilute and flush these salts into the freshwater and tidal wetlands. However, non-point source pollution into the mitigation area is one reason why USACE feels a sufficient wetland buffer is necessary to mitigate potential roadway impacts.

**8.3.2-E COMMENT:** *Section 8.3.3.2, page 8.3-3, notes that “regular flushing of the wetland area to the river would help avoid cumulative loadings of storm water runoff pollutants ...”. However, this could also serve to lower the toxic, nutrient, and sediment retention and transformation functions of the mitigated wetlands, as well as resulting in adverse impacts to the water quality of the Hackensack River. (NJDEP-1HHHH)*

**8.3.2-E RESPONSE:** The commenter refers to a mitigation plan for a development alternative presented in the DEIS (206-acre fill alternative known as the “Meadowlands Mills Alternative”) that was not carried through for further analysis in the FEIS due to environmental concerns. Under Empire Tract Alternative D, storm water would also enter freshwater wetlands and eventually be flushed into brackish wetlands. Under Empire Tract Alternative E, the majority of the storm water from the development would be collected into a 15-acre detention basin that would discharge to lower Bashes Creek and eventually into the Hackensack River. Section 7.3 of the DEIS and FEIS concluded that this storm water discharge would not result in a significant impact to Hackensack River water quality since the river is most affected by loadings from Newark Bay. In addition, before a permit could be issued, the applicant would need to obtain a Section 401 water quality certificate from NJDEP.

**8.3.2-F COMMENT:** *Removal of tide gates to allow daily tidal flow to the Empire Tract would restore a major wading bird foraging area, restore the salinity balance needed to decrease the common reed domination, and contribute to the long-term viability of the Harbor Estuary. (DOI-2T, FWS-3M)*

**8.3.2-F RESPONSE:** USACE agrees with this comment. See Section 5.3 and Response to Comment 5.2-G.

### **8.3.3 Technical Feasibility of the Mitigation Approach**

**8.3.3-A COMMENT:** *The freshwater component would not be successful, is not self-sustaining, would require long-term maintenance, and would be subject to Phragmites and/or Purple loosestrife overgrowth. The DEIS should document how the enhanced wetlands would not be subject to domination by invasive species. (DOI-2TT, FWS-3KK, ALS-1C, WIN-3MM, NJDEP-1IIII)*

**8.3.3-A RESPONSE:** Please see response to Comments 8.1-A, 8.1-B, 8.1-D, 8.1-E and 8.1-H, which address the sustainability of the freshwater mitigation component previously proposed.

#### **8.3.3.1 Likelihood of Success in Attaining Mitigation Objectives**

**8.3.3.1-A COMMENT:** *The issues of lag time, fragmentation, new MIMAC IVA scores, etc. on adverse impacts (Section 8.3.4.1) are serious problems to be addressed and must be revisited thoroughly. (WIN-300)*

**8.3.3.1-A RESPONSE:** Please see response to Comments 8.1-A and 8.3-A. After issuance of the DEIS and receipt of comments, USACE revisited these issues and addressed these concerns in this FEIS (see Sections 7.2, 8.3 and Appendix B).

**8.3.3.1-B COMMENT:** *A failure rate of greater than 50% exists for freshwater mitigation projects in the area. A much higher success rate is associated with brackish mitigation projects. The proposed mitigation for the project should be brackish. (NMFS-IV, NJDEP-1P)*

**8.3.3.1-B RESPONSE:** Please see responses to Comments 8-1A, 8-1B, 8-1D, 8-1E, and 8-1H.

**8.3.3.1-C COMMENT:** *Mitigated wetlands are seldom effective and are unsuccessful. (WEI-8B, WIN-3EE, WIN-1E, ROR-2B, JAR-1, FER-2B, BRV-7C, SCH-1B, PFV-1C, CFB-1C, HMP-3P, SCNJ-1C, BRU-6C, BRU-7C, LOP-3, LYO-1, TRE-1C)*

**8.3.3.1-C RESPONSE:** Wetland mitigation projects can be successful and effective in achieving their goals if designed, constructed and monitored appropriately. Generally restoration of tidal flow has been more successful than creation of freshwater wetlands or other types of mitigation within the HMD. Please see response to Comment 8.1-M.

**8.3.3.1-D COMMENT:** *The DEIS should provide examples of restored wetlands in the region to show that such mitigation projects have a reasonable chance of long-term success. (WEI-11C, ZED-1H)*

**8.3.3.1-D RESPONSE:** A number of restored wetland projects in the Hackensack Meadowlands are listed in Section 7.2 in the FEIS. While some of these projects are too new to be considered successful, other projects such as Saw Mill Creek illustrate that the concept can work.



#### 14.4.7 Chapter 9 Comments and Responses

**9.0-A COMMENT:** *Given the wetlands characteristic of the site and the non-water dependent nature of the proposed project, it is presumed that alternatives exist and it is the burden on the applicant to demonstrate the absence of practicable alternatives. (ENVCOM-3G)*

**9.0-A RESPONSE:** Comment noted. Please see responses to Comments on Chapter 5.0.

**9.0-B COMMENT:** *The issuance of a permit by the Army Corps of Engineers to the Mills Corporations to fill 206 acres would be a violation of the Clean Water Act. (HCI-1A, HCII-1A, KOH-1A, LAC-1A, LAN-3BFORM-1C, FORM-13E, FORM-19D)*

**9.0-B RESPONSE:** Please see response to Comment 2.3-A.

**9.0-C COMMENT:** *The issues are how does the project proposal conform with the requirements of the Clean Water Act regarding wetland fills and other issues; how does it conform with the habitat protection requirements of the fishery management plans developed by the ASMAC and the NMFS; how does it conform with the habitat protection requirements of the EPA; and how does the EIS conform with the requirements of the National Environmental Policy Act regarding the range of alternatives. (SCNJ-2D, SCNJ-1H, LF-8D)*

**9.0-C RESPONSE:** The FEIS addresses a wide range of environmental issues associated with the review of the project under NEPA, including issues that will bear on the determination of whether the proposed project conforms to the Clean Water Act. USACE will make its decision on the project's compliance with the Clean Water Act in the Record of Decision (ROD) that will be issued after the FEIS. The FEIS addresses impacts to fish habitat in Section 7.4. The FEIS addresses the wetland regulatory requirements of USEPA in Sections 6.2 and 7.2. The FEIS was prepared to conform to the requirements of the National Environmental Policy Act, including the examination of alternatives (See Chapters 5.0 and 7.0 of the FEIS).

## **APPENDIX B-DEIS**

Several commenters raised specific concerns and issues as a result of reviewing documents prepared by the applicant that were provided by USACE in the Appendix of the DEIS. The appendices were provided so that the public and reviewing agencies could review a portion of the key data and supporting information that USACE used in analysis of environmental impacts of the applicant's development alternatives. As stated in the statement preceding the appendices to the DEIS, USACE does not necessarily agree with all of the assertions or inferences drawn by the applicant concerning the data. Hence many of the issues raised by commenters refer to text prepared by the applicant and not USACE. These issues are addressed below where appropriate. It is important to stress that the conclusions of the FEIS are based upon analysis of the information by USACE, not the views or inferences of the applicant.

**APPENDIX B-A COMMENT:** *Appendix B implies that most of the reed stands are "monotypic" or nearly so; there are 528 acres of nearly monotypic reed; reed is the only plant in many places; reed stands are "homogenous: (Appendix B:E-1, B:2-3, 4-5, F:1-3, 1-6). Some of the areas mapped in the DEIS as monotypic reed are actually mixed stands. The reed stands that are now near-monotypic will not necessarily be monotypic in the future. (KIV-1)*

**APPENDIX B-A RESPONSE:** The comment refers to the appendix text prepared by the applicant; the term "monotypic" which refers to vegetation stands dominated or comprising of only one species, was not used extensively in the DEIS text to avoid ambiguity. The fact remains that the majority of the Empire Tract is dominated by common reed habitat. Mixed stands of vegetation have been mapped and are summarized in Section 6.2 of the DEIS and FEIS. Without any substantial modifications to the Empire Tract, it is anticipated that common reed would continue to dominate the site given its tenacity and its apparent ability to out compete other species. See also the response to Comment 6.2.3-G.

**APPENDIX B-B COMMENT:** *Appendix B states that open water habitats are small in extent and are bordered by reed, leading to poor habitat quality (KIV-1).*

**APPENDIX B-B RESPONSE:** This comment is attributable to the applicant; USACE makes no inferences regarding the existing habitat quality of open water habitats based on their size or surrounding vegetation within the DEIS or FEIS. The fish and benthic communities have been described in Sections 6.4 and 6.6 of the DEIS and FEIS, their surface water and sediment quality is described in Section 6.3, and their potential use by wildlife is described in Section 6.5.

**APPENDIX B-C COMMENT:** *According to Bill Sheehan (Hackensack Riverkeeper), ponding occurs adjoining the creeks on the Mills site, thus the area of surface water available to animals is actually larger than shown in the DEIS. (KIV-1)*

**APPENDIX B-C RESPONSE:** According to hydrological studies conducted by the applicant, such ponding as a result of overbank flows is infrequent. Hydrological studies conducted by the applicant on the Empire Tract did not detect overbank flooding over the period monitored from 1998 to 1999. Modeling studies indicate that limited ponding can occur up to 14 days out of 365 in an average year.

**APPENDIX B-D COMMENT:** *Appendix B states the reed wetlands onsite are not regularly flooded by the Hackensack River tides thus are not habitat for fish or benthic invertebrates (6.2-27; Appendix B:2-10). Lack of tidal exchange minimizes export of plant detritus and other materials to the estuary (6.2-28, B:2-10) thus reduces estuarine production. The DEIS does not support these assertions with data. (KIV-1)*

**APPENDIX B-D RESPONSE:** On-site monitoring of surface water levels and wetland groundwater levels provided data indicating that the wetlands are not regularly flooded by the river (see 1998 and 1999 Surface Water Monitoring Program reports). Field surveys of available habitat for fish and benthic invertebrates of the Empire Tract have indicated that fish do not utilize the wetlands due to a lack of regular surface water inundation (see Section 6.4 of the EIS). The benthic invertebrate populations in the wetlands are more typical of terrestrial habitats than wetlands (see Section 6.6 of the EIS). USACE does not agree that lack of tidal exchange *minimizes* export of detritus and other materials to the estuary; it is quite apparent that the site presently exports such material. Literature data cited in Appendix B of the FEIS from tidal systems indicates that total organic carbon export is significantly higher in wetlands subject to regular inundation.

**APPENDIX B-E COMMENT:** *Appendix B implies that few birds breed onsite due to the extensive reed dominance (Appendix B:5-8). Data in the DEIS show reasonable diversity of breeding birds for an extensive, nontidal, freshwater or low salinity marsh dominated by tall graminoid vegetation, whether reed, cattail, bulrush, or cordgrass. Several species of birds observed onsite during the TAMS studies are claimed to be non-breeders in the DEIS but may in fact be breeding at the site (KIV-1).*

**APPENDIX B-E RESPONSE:** The text cited is attributable to the applicant. Moreover, the commenter does not indicate what is meant by a “reasonable diversity” of breeding birds. Please see responses to Comments 6.5-D, 6.5-G and 6.5.3.2-A.

**APPENDIX B-F COMMENT:** *Appendix B states there are no large expanses of mudflats that can be used by migrant shorebirds and waterfowl for foraging and resting*

*(B:E-1). This may be true, but the Mills site offers other important resources for birds. It is not necessary that every site in the HMD contain extensive mudflats (KIV-1).*

**APPENDIX B-F RESPONSE:** The analysis presented in Section 6.5 and 7.5 of the DEIS and FEIS does not assume that every site in HMD must contain extensive mudflats. The applicant has proposed creation of mudflat habitat as part of their mitigation plan, so it is essential to document existing conditions relative to their proposal in order to project potential changes in species composition of wildlife species groups that would be affected both adversely and positively by their proposals.

**APPENDIX B-G COMMENT:** *Appendix B states reed reduces the abundance of food plants and degrades habitat value for wildlife (B:2-8). Presumably "wildlife" in this context means birds whose diets include substantial components of plant foods, such as waterfowl and rails. Cattails and Spartina species, like common reed, commonly also reduce the abundance of plant such as smartweeds, bulrushes, water-millet (Echinochloa), and spike rushes that produce seeds or vegetative parts eaten by birds. On the other hand, common reed produces aphids, scale insects, other invertebrates, muskrats, and other animals that are eaten by various bird species as well as being eaten by other animals which in turn are eaten by birds(B-G).*

**APPENDIX B-G RESPONSE:** Please see the responses to Comments 6.2-F, 6.2-G, 6.2-J and 6.2.3-O. Also, Section 6.5 of the DEIS and FEIS describe wildlife use of common reed habitat.

**APPENDIX B-H COMMENT:** *Appendix B indicates reed is a fire hazard, impedes water flow, and restricts access of people and animals (B:2-8). No data was found in the DEIS or elsewhere to indicate that common reed is a worse fire hazard than other plant communities in the high elevation marshes and their borders, or in other habitats, in the HM. Fire diversifies the structure of reed stands and probably makes them suitable for different communities of plants and animals than unburned reed stands. It should be feasible to create firebreaks around the margins of reed stands to reduce the likelihood of fires spreading from the reed stands to developed areas. Slowing and absorbing the energy from water flow, especially during floods, can be beneficial to downstream areas. The DEIS does not explain how reed may affect stormwater hydrology at the Mills site. Reed does reduce access of people to certain areas, and this is often beneficial to wildlife by creating de facto refuges (KIV-1).*

**APPENDIX B-H RESPONSE:** The comment refers to a submission provided by the applicant, and does not reflect the findings of USACE. While it is noted that occasional fires do occur, USACE does not believe the role of fire in common reed communities to be a significant environmental issue.

Section 6.1 of the FEIS describes the role of common reed in the hydrological cycle. Common reed vegetation results in significant evapotranspiration in the marsh and

performs water quality treatment functions as described in Section 6.2. Most storm water presently entering the site from the upgradient watershed does so through channel flow as opposed to sheet flow (see Section 6.13 of the DEIS and FEIS).

**APPENDIX B-I COMMENT:** *On DEIS Appendix B page 3-7 it is stated that "native vegetative species" will be planted to replace common reed. The tables (Tables 3-1 through 3-7) of "Candidate Species" for plantings, however, list a number of species that are not native to northern New Jersey as well as some species that are not likely to survive the polluted, brackish waters of the Hackensack River. *Iris pseudacorus*, *Itea virginica*, *Salix purpurea*, *Quercus nigra*, *Elaeagnus angustifolia*, *Elaeagnus umbellata*, *Lonicera tatarica*, *Pinus taeda*, and *Pinus thunbergii* are not native to northern New Jersey but originate from Eurasia or portions of the United States well south of the site. *Myriophyllum spicatum* (B:4-11) is a native of Eurasia. *Lantana* (B:4-13) also an exotic plant. Some of these species are well known pest plants in the northeastern states. *Zizania aquatica*, *Carex lacustris*, *Woodwardia areolata*, *Chamaecyparis thyoides*, *Carex lanuginosa*, and *Nuphar luteum* are species that are unlikely to tolerate the maximum salinities recorded for the Hackensack River at the site (ca. 12ppt) or the high nutrient levels of the site. *Chamaecyparis thyoides* (Atlantic white cedar) usually grows on low pH, low nutrient, low chloride soils (Landerman 1989). Thus the lists of candidate species appear to be somewhat haphazard rather than carefully selected for this particular site. (KIV-1)*

**APPENDIX B-I RESPONSE:** The comment refers largely to freshwater enhancement measures considered under certain development alternatives that were not carried through for analysis in the FEIS. Under the revised wetlands mitigation plan proposed for Empire Tract Alternative E, the applicant has greatly reduced the freshwater component of their mitigation plan, relying instead upon tidal restoration. Enhancements to the freshwater area will not be given wildlife credit for mitigation. As a result, most of the non-tidal wetland area will be enhanced through open water marsh management techniques and limited plantings. The applicant has indicated that the species noted by the commentor will not be candidates for planting under the Empire Tract Alternative E wetland mitigation plan (see Section 8.2 in the FEIS).

**APPENDIX B-J COMMENT:** *Spartina alterniflora*, which appears to be an important species in the mitigation project, may not be a vigorous competitor at the site. At Piermont Marsh on the Hudson River at the Mills site, *Spartina alterniflora* occurs in a very limited distributed along the banks of tidal creeks and elsewhere in the marsh does not seem to compete with common reed. If this species is intended to be a dominant plant in substantial areas of the mitigation wetlands, the applicants need to make the case for its suitability and long term sustainability at the site (KIV-1).

**APPENDIX B-J RESPONSE:** The natural growth of *Spartina* along the Hackensack River and the success of establishing this species at the Marsh Resources wetlands mitigation bank site and other sites near the Empire Tract provide evidence that this site

will be suitable for this species to survive. A monitoring and maintenance program after construction of the wetland mitigation areas will provide additional opportunities to ensure its long-term sustainability (see Appendix M of the DEIS and Chapter 8 of the FEIS).

**APPENDIX B-K COMMENT:** *There are many errors in the spelling of scientific names of organisms in the DEIS (e.g. 6.5-9, 6.5-19, 6.8-2) and Appendix B pages 3-8, 4-14, and Tables 3-1 through 3-7. In at least four cases (two bird species and two plant species) there are erroneous combinations of scientific and common names; in the bird case it is unclear which species are referred to (KIV-1).*

**APPENDIX B-K RESPONSE:** As part of this FEIS preparation, the spelling of the scientific names of the organisms in Section 6.5 was reviewed for accuracy and corrected, as necessary. Changes will not be made to what was originally Appendix B of the DEIS, as this document is not included in the FEIS, already having been reviewed by the public.

#### **APPENDIX F**

**APPENDIX F-A COMMENT:** *The analysis of the bird data omits "passive" records i.e. birds observed on the wing (KIV-1).*

**APPENDIX F-A RESPONSE:** The comment refers to the Appendix F; passive species were reviewed and evaluated by USACE.

**APPENDIX F-B COMMENT:** *Some breeding birds (especially the rare sedge wren) appear and sing during the summer, but the breeding surveys were discontinued after June 17(KIV-1).*

**APPENDIX F-B RESPONSE:** The one-year duration and periodic observation periods within that one-year period for the avian survey were reviewed by the regulatory agencies prior to commencement of the survey as part of their review of the survey methodology, as noted in Section 1.1.1 of the Avian Survey Report (Appendix F of the DEIS). It was determined that the summer period of observation was sufficient to document the presence of breeding birds for the summer period. The survey protocol called for the observation of site utilization (i.e., behavior) of each bird observed during all sampling periods. Therefore, any breeding behavior of the sedge wren and other bird species should have been recorded during the sampling period. The survey methodology took additional steps to observe and document the occurrence of any breeding behavior during spring sampling period.

**APPENDIX F-C COMMENT:** *The survey durations were short (1.5 hours for a transect and 2.0 hours for a tower survey (KIV-1)).*

**APPENDIX F-C RESPONSE:** The duration of each observation period was longer than normally performed for standard avian surveys. Observations for this period of time usually provide many duplicate observations of the same individuals utilizing that area on that particular day. These periods of observations provided information on bird activities in order to assess potential feeding, courting, breeding and nesting activities. Please also see the response to Comment 6.5-C.

**APPENDIX F-D COMMENT:** *The towers were ca. 1500-3500 feet apart (F: Figure 2) which is too far for dependable identification of small birds such as wrens, warblers, and sparrows. (KIV-1)*

**APPENDIX F-D RESPONSE:** Please see the response to Comment 6.5-C. The sampling locations were designed to cover different sections of the Empire Tract to obtain representative samples of the tract and observations of specific habitat types found on the tract. The tower and ground transects were not established to observe all of the Empire Tract, but representative areas on the tract. Given the fact that these species were observed during the survey, the sampling protocol did provide for observation of these species.

**APPENDIX F-E COMMENT:** *On page 1-39, the records of savannah sparrow on site in the breeding season are claimed not to be breeding birds because of the unsuitability of the reed habitat, yet areas of sparsely vegetated fill appear suitable breeding habitat for this species. (KIV-1)*

**APPENDIX F-E RESPONSE:** Chapter 6.5 of the DEIS, which presents an independent review of the data provided by the applicant, states under "Breeding Species": "A total of 11 species were confirmed as breeding on the Empire Tract in 1997, (Table 6.5-5) (TAMS, 1998a). All of these birds have been recognized historically as breeding in the HMD (HMDC, 1992). The below table is conservative in that it is limited to species for which some activity associated with breeding was noted in the field, such as courtship behavior, birds flying with nesting material in their beaks, or other similar indicators. It is possible, given the size of the tract, that other species that nest in dense vegetation and are more difficult to see, such as rails or bitterns, or savannah sparrow, may also breed on site. It also is possible that species that did not breed on the Empire Tract during the avian study from 1996 to 1997 might breed on site sporadically during other years. It also is possible that some species exhibiting courtship behavior on the Empire Tract actually bred off site."

**APPENDIX F-F COMMENT:** *I question whether American black duck is an "extremely unlikely" breeding species onsite (1-33); black ducks were seen at all seasons (1-18) and it would have been difficult to detect breeding by one or a few pairs given the limitations of the surveys (see above) and the secretiveness of this species during the breeding season. (KIV-1)*

**APPENDIX F-F RESPONSE:** Please see the response to Comment Appendix F-E above for a general response regarding breeding species. According to the applicant, the potential for American black duck breeding on the Empire Tract was carefully examined in the avian survey. As noted in Section 1.4.2 of the report, two ornithologists with special expertise in black duck breeding biology examined the site during the breeding seasons and concluded that existing conditions were only marginally acceptable for black duck brood rearing, and that successful breeding by this species was unlikely.

**APPENDIX F-G COMMENT:** *The statement on page 1-15 that few individuals of yellow warbler breed in New Jersey is at odds with information in Walsh et al. (1999). On page F: 1-15, yellow warbler is said not to be summer-resident on the site, but on page 1-23 Table 1.4-2 lists 51 observations of "summer resident" yellow warbler (KIV-1).*

**APPENDIX F-G RESPONSE:** According to the applicant, the literature citation concerning the lack of yellow warbler breeding in New Jersey is from Birds of New Jersey Their Habits and Habitats, by Dr. Charles Leck. Yellow warbler were observed on the Empire Tract during the summer months (Table 1.4-2), but were not found to be breeding on the site. The comment does not affect the conclusions of the DEIS or FEIS.

**APPENDIX F-H COMMENT:** *The report of Le Conte's sparrow in summer (1-29) is probably erroneous and requires elucidation. There are only 12 accepted records of this species in the state, none in summer (Walsh et al. 1999 ) (KIV-1).*

**APPENDIX F-H RESPONSE:** The single observation of Le Conte's sparrow, regardless of whether it is accurate, does not affect the conclusions of the DEIS or FEIS. As stated above, USACE (and other reviewing agencies) reviewed the applicant's study results and found them sufficient as a basis for evaluating impacts from the proposed project. USACE incorporated regional data and data from other sources in the DEIS and FEIS description of the site (see Section 6.5).

**APPENDIX F-I COMMENT:** *It is stated on page 1-1 that "wetland-dependent species...would not be commonly observed on the Empire tract" because of low habitat quality and diversity. Yet many of the species reported are largely dependent on wetlands in this region. (KIV-1)*



**APPENDIX F-I RESPONSE:** See Section 6.5 of the DEIS and FEIS; USACE does not agree with this assertion.

**APPENDIX F-J COMMENT:** *The statements on page 1-33 that “only 33 percent of the total bird species that were observed on site are considered wetland species” and “Over 85 percent of all species...were observed in the Phragmites/wetland habitat” seem contradictory (KIV-1).*

**APPENDIX F-J RESPONSE:** The comment cited is taken from the appendix document prepared by the applicant. Section 6.5 of the DEIS and FEIS present USACE’s analysis of impacts to wetland bird species.

**APPENDIX F-K COMMENT:** *The statement that no northeastern species requires common reed (1-10) can also be said about many other important and highly regarded species of wetland plants (e.g. cattails) (KIV-1).*

**APPENDIX F-K RESPONSE:** Comment noted.

**APPENDIX F-L COMMENT:** *Appendix F states that poor water quality and poor shallow water habitat on site limit the wetland-dependent birds. The claim that the proposed “enhanced” marshes will have more breeding bird species than the existing marshes (1-4) misses an important point of bird conservation: it is not size of the species list per se that is important, it is the occurrence of rare, vulnerable, or habitat-restricted species (see Kiviat 1989, Weller 1999:230), as well as the levels of density, productivity, health, and fitness in the populations (KIV-1).*

**APPENDIX F-L RESPONSE:** USACE agrees with the commenter that the size of the species list is not the only important factor in examining habitat quality and utilization. Also important are the diversity of habitats in an area and the presence of many factors that allow various bird species to utilize an area not only for feeding and shelter, but possibly courting, breeding and nesting. Please see the response to Comment 6.5-G and Sections 7.5, 7.8 and Chapter 8.0 of the FEIS for discussion of potential impacts, both positive and negative, of the development alternatives and their respective mitigation plans on rare species.

## **APPENDIX G**

**APPENDIX G-A COMMENT:** *The mammal survey reported in the DEIS (6.5-27) was limited to a five day visual survey in April of one year, supplemented by casual observations during a year of bird surveys. Apparently no trappings was done to sample mice, voles, shrews, moles, and weasels, nor any bat detector surveys to sample bats*

*foraging or roosting onsite. In addition to the 10 species of mammals found on the site (6.5-28), I see no reason why an additional 13 species listed for HM in Appendix G (pages 35-36) would not use the Mills site (these additional species, 12 of which are native, are opossum, masked shrew, short tail shrew, eastern mole, 3 of the 4 bat species, long-tailed weasel, red fox, gray fox, white-footed mouse, meadow vole, and meadow jumping mouse). In fact, I would expect to find all 13 species using the reed stands (including the mixed stands). The inadequacy of the onsite mammal survey makes the reed habitat appear much worse for mammal species richness than it almost certainly is. (KIV-1)*

**APPENDIX G-A RESPONSE:** Comment noted. The mammal survey reported in the DEIS was the only site specific information available. If the commenter has additional census data available, USACE would consider it. The commenter is correct in assuming that no trapping was conducted for mice, voles, shrews, moles or weasels. The HMDC species list was provided in the DEIS as a reference for what other species are present in the region and which could potentially use the site; no inferences are made that the species listed were the only ones ever to use the site or capable of using it.